



IMPACT ASSESSMENT REPORT



**Welding for Nation Building –
Welding Training for BPL Youth
A CSR Project of Cochin Shipyard Ltd.**

February 2026



**SCHOOL OF MANAGEMENT STUDIES
Cochin University of Science and Technology**



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Executive Summary

This impact assessment evaluates the Welding for Nation Building Corporate Social Responsibility (CSR) project of Cochin Shipyard Limited (CSL), implemented in partnership with Don Bosco Tech, Vaduthala, with the objective of enhancing employability and livelihood opportunities for youth from economically disadvantaged and Below Poverty Line (BPL) households in Kerala. The assessment was conducted by the School of Management Studies, Cochin University of Science and Technology (SMS, CUSAT), using the OECD-DAC Evaluation Framework, encompassing the six dimensions of Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability. The study adopted a mixed-methods approach, combining qualitative interviews with beneficiaries, trainers, employers, and comparable training institutions, along with a structured telephone survey of 123 beneficiaries.

The findings indicate that the project demonstrates high relevance, addressing a clearly articulated need for affordable, industry-relevant welding training among economically disadvantaged youth who face financial and structural barriers to accessing formal vocational education. The programme effectively targets first-generation technical learners and aligns closely with local and regional labour market demand, particularly in Kerala's expanding construction, fabrication, and industrial sectors. The inclusion of internationally recognised certification further strengthens the programme's relevance from both beneficiary and employer perspectives.

The project also exhibits strong coherence, aligning well with national skill development

priorities such as the Skill India Mission and the National Skill Development Policy, while complementing existing vocational training efforts. Sectoral coherence is evident in the programme's focus on welding, a critical trade supporting infrastructure, shipbuilding, and manufacturing industries. From a corporate standpoint, the initiative aligns strategically with CSL's CSR mandate and its core industrial ecosystem, reinforcing institutional consistency and purpose.

On the effectiveness dimension, the project has largely achieved its intended objectives. High completion and certification rates, strong self-reported skill confidence, and positive employment outcomes indicate effective translation of training inputs into employable skills. Employer feedback validates the technical competence and safety awareness of trained welders, though behavioural readiness and workplace discipline emerged as areas for incremental improvement rather than fundamental shortcomings.

The evaluation finds the project to be efficient in its use of resources. The CSR-supported model delivers high-quality welding training at no cost to beneficiaries, compared to expensive private alternatives. Efficient utilisation of infrastructure, extensive hands-on practice, adoption of advanced training tools such as welding simulators, and reduced retraining requirements for employers collectively demonstrate strong value for money.

In terms of impact, the project has generated meaningful socio-economic and psychosocial outcomes. Beneficiaries experienced livelihood

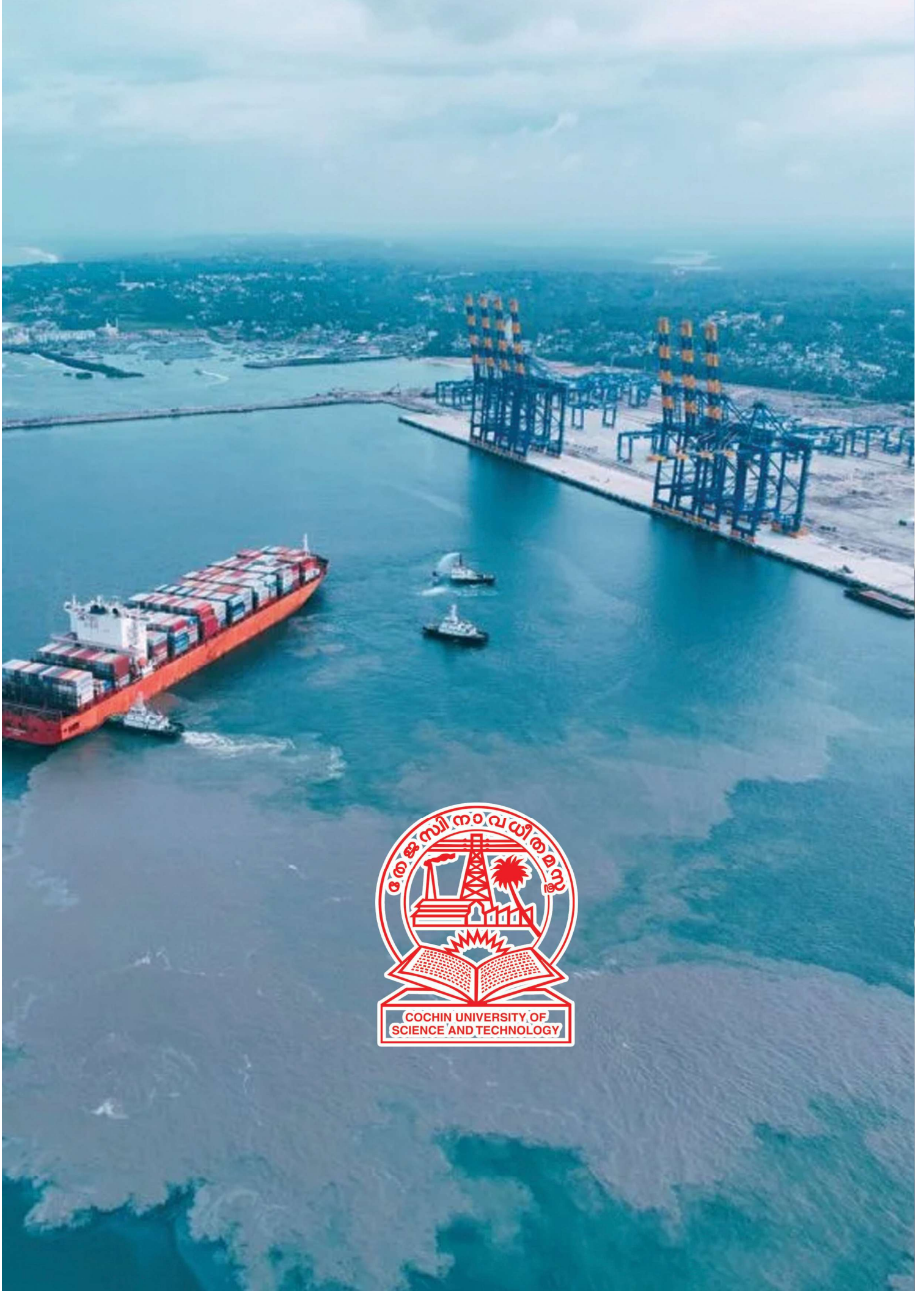
transformation, enhanced professional confidence, improved family well-being, and early integration into the labour force. By enabling economically disadvantaged youth to participate productively in skilled employment, the project contributes to social inclusion, household economic stability, and the effective utilisation of India's demographic dividend.

With respect to sustainability, the assessment indicates strong potential for the continuation of benefits beyond the CSR funding period. The acquisition of transferable welding skills, recognised certification, and sustained industry

demand support long-term employability. While behavioural aspects influencing employment retention warrant continued attention, they do not undermine the overall sustainability of outcomes.

Overall, the Welding for Nation Building project emerges as a well-designed and impactful CSR intervention that effectively translates skill development into sustainable livelihood outcomes. The programme demonstrates strong alignment with beneficiary needs, industry demand, and broader developmental objectives, and offers a robust, replicable model for CSR-led skill development initiatives.





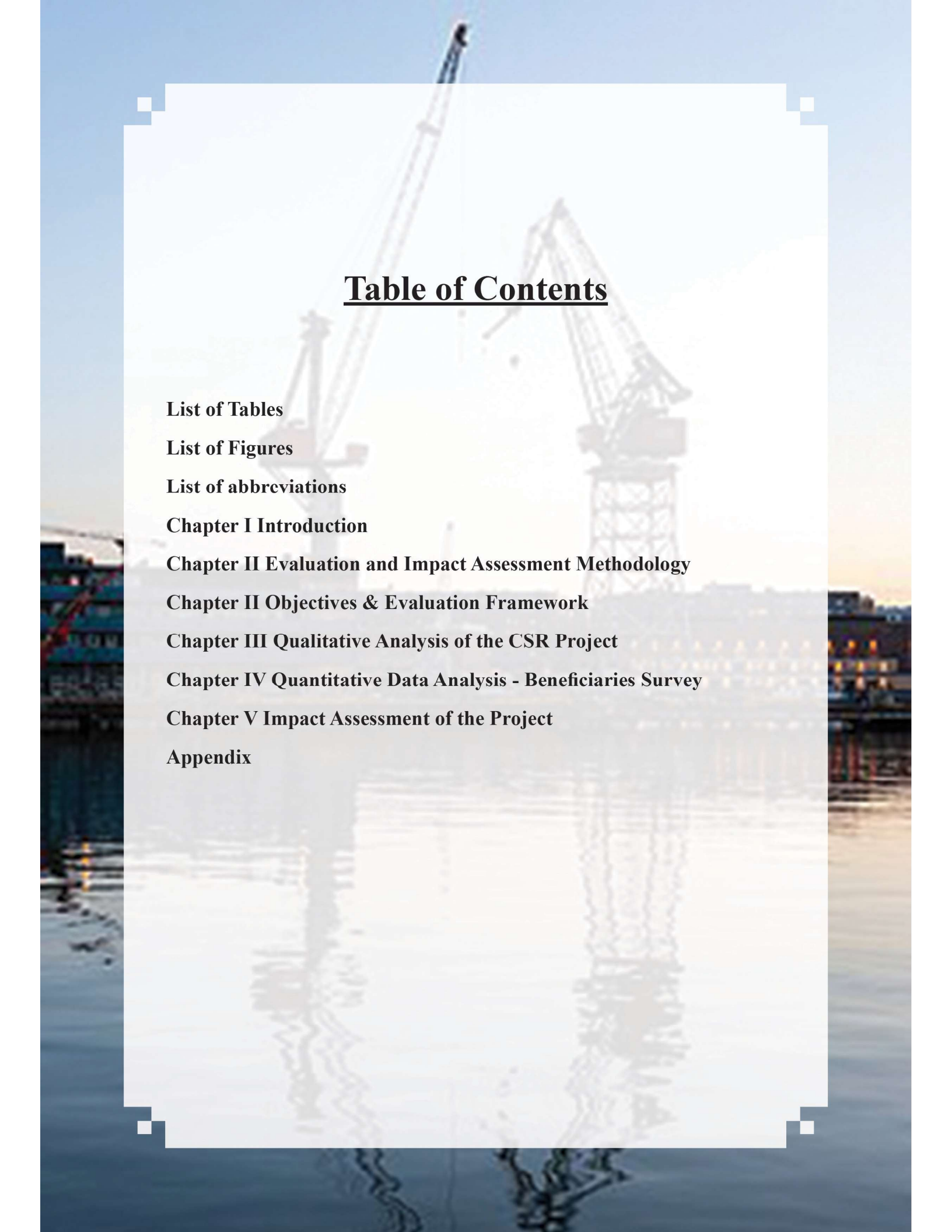


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List of Abbreviations

CSL Cochin Shipyard Limited

CSR Corporate Social Responsibility

ITC Industrial Training Centre

ITI Industrial Training Institute

NCVT National Council for Vocational Training

**OECD-DAC Organisation for Economic Co-operation and Development –
Development Assistance Committee**

SDG Sustainable Development Goals

**SMS, CUSAT School of Management Studies, Cochin University of
Science and Technology**

TIG Tungsten Inert Gas Welding

MIG Metal Inert Gas Welding

I. Introduction

India's demographic advantage, with a large proportion of its population in the working-age group, brings with it an urgent need for systematic skill development initiatives targeted at the youth. However, numerous governmental efforts notwithstanding, the country continues to face persistent skill gaps, particularly among the youth from economically and socially disadvantaged backgrounds. Industry reports shortage in supply of adequately trained and employable workers even as the size of the population in productive age is enormously large. This mismatch in the employability of the workforce remains one of the critical challenges to inclusive economic growth in the country. Flagship national programmes such as the Skill India Mission, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), and the National Skill Development Mission (NSDM) seek to enhance employability of the youth through standardized, industry-linked training. Despite these efforts, access to the opportunities in skill development remains uneven, denying vast sections of economically backward youth the opportunities for gainful employment and economic progress. It is seen that a significant part of the youth from economically weaker sections discontinue schooling before completing secondary education, which limits their eligibility for formal vocational training programmes. As a result, they are often confined to informal, low-paying occupations with little scope for upward mobility.

India's persistent skill gap is therefore not merely a labour market concern, but a broader development challenge with direct implications for inclusive growth and social equity. From a global perspective, strengthening youth skill development is central to the United Nations Sustainable Development Goals, particularly SDG 4 (Quality Education), which emphasises inclusive and equitable access to relevant technical and vocational skills, and

SDG 8 (Decent Work and Economic Growth), which calls for productive employment opportunities for all, including young people. Within this framework, the provision of inclusive, flexible skill development pathways that cater to economically disadvantaged youth with diverse educational backgrounds, ranging from school dropouts to those with formal schooling, becomes especially critical, as these groups face a heightened risk of exclusion from demand-driven skill formation, formal employment, and upward occupational mobility.

It is within this national and global development context that the CSR project of Cochin Shipyard Limited (CSL) in skill development positions itself. Through its collaboration with Don Bosco Tech, Vaduthala, CSL supports structured, industry-relevant training in welding for youth from disadvantaged communities. This initiative closely aligns with the objectives of the National Skill Development Mission by linking technical education with employability and livelihood generation, while simultaneously advancing the broader SDG agenda of inclusive skill development and equitable access to industrial employment.

1.1 Welding for Nation Building, the CSR Project

Welding for Nation Building is a flagship Corporate Social Responsibility (CSR) initiative of Cochin Shipyard Limited (CSL) aimed at enhancing the employability of socially and economically disadvantaged youth through industry-relevant skill development. Since 2015, the project has been implemented in partnership with Don Bosco Tech as the executing agency. Over five phases, the programme has successfully trained and facilitated the placement of more

than 262 beneficiaries across various industrial sectors, including manufacturing, shipbuilding, construction, and engineering. The training is delivered through Don Bosco Tech IIW India Authorised Training Body (ATB), Kochi, the only International Institute of Welding (IIW)-approved institution in South India authorised to train and certify candidates for the International Welder Diploma. The programme adheres to globally recognised standards of safety, quality, and professional competence, thereby ensuring industry acceptance and mobility of the trained workforce. The skill development curriculum comprises 600 hours of training, combining classroom instruction with intensive hands-on practice in key welding

processes such as Manual Metal Arc Welding (MMAW), Gas Metal Arc Welding (GMAW/MIG-MAG), and Gas Tungsten Arc Welding (GTAW/TIG). Training and assessment are conducted in compliance with ISO 3834 and ISO 9606 qualification standards.

The training facility is equipped with state-of-the-art infrastructure, including modern welding workshops, augmented reality welding simulators, fabrication and testing facilities, and industry-supported learning tools, developed in collaboration with technology partners

such as KEMPI. Upon successful completion, candidates receive joint certification from Don Bosco Tech IIW India, Cochin Shipyard Limited, and the IIW Cochin Branch, including an International Welder Diploma and a Welder Qualification Test Certificate as per ISO 9606-1.

These certifications significantly enhance the employability of participants by equipping them with internationally benchmarked skills aligned with current and emerging industry requirements.

1.2 Cochin Shipyard Ltd: A Brief Profile

Cochin Shipyard Limited (CSL), a public sector undertaking, is the largest shipbuilding and maintenance facility in India. Established in 1972 as a Government of India company, CSL has grown into a dynamic and globally recognized company, contributing significantly to the country's maritime prowess. This Miniratna located in Kochi, Kerala, plays a pivotal role in strengthening India's shipbuilding industry, catering to a diverse market of vessels ranging from sophisticated naval ships to cutting-edge merchant vessels. India's first indigenous aircraft carrier of the Indian Navy, INS Vikrant which was successfully launched in 2021 was built by Cochin Shipyard Ltd.



The company's Corporate Social Responsibility (CSR) mission lays emphasis on advancing inclusive growth in society. Over the years, CSL has been engaged in several social responsibility initiatives focused on strengthening the marginalized sections of the community through multiple proactive interventions. In addition to strongly aligning its core business operations with a commitment to societal well-being and environmental sustainability. The company's social interventions range from health and nutrition, sports, education, rural development, women empowerment, to environmental conservation. These initiatives are aimed at enhancing quality of life of people while championing environmental and ecological causes for sustainable development.

1.3 School of Management Studies, CUSAT

The School of Management Studies (SMS) is one of the oldest business schools in the country and is a constituent unit of the Cochin University of Science and Technology (CUSAT). CUSAT is a leading public university in India's higher



education sector, currently ranked 41st under the National Institutional Ranking Framework (NIRF). SMS functions within the University's

established ecosystem for research, consulting, and entrepreneurship, enabling the school to undertake systematic research and evidence-based consulting and impact assessment assignments.

1.4 Don Bosco: The Implementation Agency

Don Bosco Tech, Vaduthala was established in 1962 as a private, non-formal technical institute offering diploma-level vocational programmes. The institution is recognised and affiliated with the National Council for Vocational Training (NCVT) under the Ministry of Labour, Employment and Training, Government of India. Over time, it has evolved into a full-fledged private Industrial Training Institute (ITI), preparing trainees for the All India Trade Test across multiple engineering trades. In addition to its formal ITI programmes, the institution offers a range of short-term, job-oriented skill training courses aimed at improving employability outcomes. As an implementation agency, Don Bosco Tech, Vaduthala focuses on delivering holistic skill development interventions that combine technical training with personal and behavioural development.



II. Objectives & Evaluation Framework

2.1 Objectives

The impact assessment seeks to evaluate the design, implementation, and outcomes of the Welding for Nation Building CSR project in line with the OECD-DAC evaluation criteria. The specific objectives of the study are:

1. **Relevance:** To assess the extent to which the programme addresses the skill development needs of economically and socially disadvantaged youth and aligns with labour market and industry requirements.

2. **Effectiveness:** To evaluate the degree to which the programme has achieved its stated objectives, including the quality of training delivery, curriculum relevance, and skill acquisition outcomes.

3. **Impact (Economic and Social):** To analyse the programme's contribution to improved employability, income levels, and broader socio-economic well-being of trainees and their households.

4. **Targeting and Inclusion:** To examine whether the programme effectively reaches the intended beneficiary groups, including youth from diverse educational backgrounds, and provides equitable access to skill development opportunities.

5. **Stakeholder Satisfaction and Engagement:** To assess the perceptions and satisfaction levels of key stakeholders, including trainees, trainers, employers, and programme administrators, and to identify areas for improvement.

Additional OECD-DAC dimensions such as efficiency, coherence, and sustainability are examined as part of the overall evaluation framework.

2.2 Scope of the Assessment

Consistent with the OECD-DAC framework, the scope of the assessment covers inputs, processes, outputs, outcomes, and early impacts of the CSR intervention. The evaluation focuses on the following dimensions:

1. **Programme Relevance:** Alignment of training content, certification, and skill focus with beneficiary needs, industry demand, and national skill development priorities.

2. **Training Delivery and Quality:** Assessment of curriculum design, training duration, pedagogical methods, infrastructure, safety practices, and instructor competence.

3. **Targeting and Outreach Mechanisms:** Review of outreach strategies, admission processes, and selection criteria to determine inclusiveness and appropriateness of beneficiary selection.

4. **Employment and Livelihood Outcomes:** Analysis of placement support mechanisms, placement rates, nature and stability of employment secured, wage levels, and alignment with trained skills.

5. **Stakeholder Feedback and Institutional Processes:** Feedback from trainers, employers, implementing partners, and CSR representatives regarding implementation effectiveness, coordination, and operational challenges.

6. **Sustainability:** Assessment of the likelihood that programme outcomes will be sustained beyond the CSR funding period.

2.3 Project Approach and Methodology

The study adopted a mixed-method approach, combining qualitative and quantitative methods, to meet the objectives of the impact assessment of Cochin Shipyard Limited's (CSL) CSR-supported welding training programme implemented through Don Bosco Tech, Vaduthala. The methodology was designed to capture both beneficiary experiences and ecosystem-level perspectives from training institutions and employers in the skilled trades sector.

2.3.1 Qualitative Interviews with beneficiary trainees

The qualitative component involved telephonic interviews with trainees who had completed the welding course under the CSR project. Each interview lasted approximately 25 minutes and followed a semi-structured interview checklist covering training experience, perceived skill enhancement, job readiness, employment outcomes, and post-training challenges. The telephonic mode enabled wider geographical coverage and respondent convenience.

2.3.2 Quantitative Survey of Trainees

Following the qualitative phase, a structured survey was administered to beneficiary trainees to capture measurable indicators of training outcomes. The survey collected data on socio-demographic characteristics, training satisfaction, self-assessed skill improvement, employment status, and perceived livelihood impact. Telephone-based administration helped ensure higher response rates and consistency in data collection.

2.3.3 Key Informant Interviews with similar Training Institutions

To understand supply-side dynamics, face-to-face interviews were conducted with representatives of two training institutions:

- An institution offering industrial training under

another CSR initiative, and

- A well- established Industrial Training Institute (ITI) providing formal vocational programmes. These interviews provided comparative insights into curriculum relevance, training design, placement mechanisms, and institutional challenges.

2.3.4 Qualitative interviews with Recruiters from Industry

To complement institutional perspectives, an interview was conducted with an industry employer in Kochi actively recruiting welders. This interaction focused on industry skill requirements, demand conditions, and employability perceptions of trainees from CSR-linked programmes.

2.3.5 Data Analysis

Qualitative data from interviews were subjected to thematic content analysis, identifying recurrent patterns and categories related to training quality, employability, and livelihood impact. Quantitative responses from the structured survey were summarized using descriptive statistics to present aggregate trends in beneficiary outcomes.

2.3.6 Ethical Considerations

All respondents were informed of the study's purpose and assured of confidentiality. Participation was voluntary, and consent was obtained prior to each interview or survey interaction. No personally identifiable data were disclosed in the reporting of results.

2.4 Framework for Assessment

The evaluation is guided by the OECD-DAC Evaluation Criteria, which assess six key dimensions of development interventions, viz. Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability. Each dimension is interpreted in the context of the present study as follows:

- i. Relevance: Relevance refers to the degree to

which the CSR project addresses the actual needs and priorities of the intended beneficiaries and contributes to national and local development objectives. In the present study, it indicates how far the welding training programme aligns with the skill development requirements of economically disadvantaged youth in Kerala, and with broader national priorities such as the Skill India Mission and the National Policy on Skill Development and Entrepreneurship (2015). The dimension assesses whether the training content, duration, and certification respond to real labour market needs and the aspirations of the target group.

ii. Coherence: Coherence examines the compatibility of the intervention with other ongoing skill development initiatives in the same sector or region. In this assessment, coherence refers to the extent to which the CSL- Don Bosco training project complements or overlaps with other government or CSR-led vocational training programmes, such as those of NSDC, PMKVY, or similar industry-partnered initiatives. It also considers the consistency of the project's objectives with CSL's corporate CSR policy and the company's broader commitment to national skill-building efforts.

iii. Effectiveness: Effectiveness measures the extent to which the project has achieved its stated objectives and intended results. For this study, effectiveness is evaluated in terms of the number of trainees successfully completing the course, certification outcomes, the degree of skill enhancement reported by beneficiaries, and post-training employment or placement achievements. It also includes an assessment of beneficiary satisfaction

and perceived improvement in job readiness or livelihood opportunities following the training.

iv. Efficiency: Efficiency assesses how economically and promptly the project's resources have been utilized to produce the intended outputs. In this context, efficiency pertains to the cost-effectiveness and operational smoothness of programme delivery, covering aspects such as course duration, utilization of infrastructure and equipment, trainer deployment, and administrative support. It also considers whether the partnership between CSL and Don Bosco Tech ensured optimal use of CSR funds in reaching the target group.

v. Impact: Impact reflects the broader and longer-term changes brought about by the project on the lives of beneficiaries and the local community. In this study, impact is assessed in terms of improved employability, income generation, social mobility, and enhanced confidence or self-efficacy among trained youth. It also examines secondary effects such as community perception of vocational training, gender inclusivity, and contribution to local industry skill supply.

vi. Sustainability: Sustainability considers the likelihood of the project's benefits continuing beyond the period of CSR support. In this context, it evaluates whether the trainees are able to continue to be employed using the acquired skills, and whether Don Bosco Tech has the institutional capacity to continue such programmes independently or through future collaborations, and the potential for scaling up or replicating the model in other locations.

III. Qualitative Analysis of the CSR Project

3.1 Purpose and Role of the Qualitative Phase

The qualitative phase of the impact assessment was designed to develop a holistic understanding of the Welding for Nation Building CSR project, with particular emphasis on its relevance, implementation processes, and perceived outcomes. By engaging multiple categories of key informants, this phase sought to capture beneficiary experiences, institutional perspectives, and industry expectations, thereby providing depth and context to the evaluation of programme effectiveness. Findings from this phase informed the subsequent quantitative analysis and supported triangulation across data sources, in line with OECD-DAC evaluation principles.

3.2 Data Sources and Respondent Profile

The qualitative analysis drew on in-depth, semi-structured interviews conducted with the following respondent groups:

i. Beneficiary trainees:

A total of 10 trainees from different batches of the welding programme were interviewed. Participants were selected to represent diverse training phases, educational backgrounds, and socio-economic contexts, enabling the capture of varied learning experiences. Interviews explored training experiences, challenges faced during the course, perceptions of curriculum relevance, and post-training employment outcomes.

ii. Implementing agency representatives:

Interviews were conducted with trainers and centre managers of Don Bosco Tech, Vaduthala, to understand institutional perspectives on training delivery, curriculum design, student

performance, assessment practices, and operational challenges associated with programme implementation.

iii. Industry recruiters:

To strengthen external validation, two representatives from companies that had previously recruited Don Bosco-trained welders were interviewed. These discussions focused on employer expectations, workplace performance of recruited trainees, perceived skill gaps, and the value of the training programme in meeting industry requirements.

iv. Similar training institutions:

Chief functionaries/Programme coordinators from two other institutions offering welding training were interviewed. These included one institution delivering welding courses under another CSR initiative and one established Industrial Training Institute (ITI). Their inputs helped situate the Don Bosco programme within the broader skill development ecosystem and enabled comparison of training standards, technologies used, and placement support mechanisms.

3.3 Data Collection Process

All interviews were semi-structured, guided by a pre-prepared interview guide covering core domains such as training relevance, employability outcomes, satisfaction levels, and programme effectiveness. Interviews were conducted in an open-ended and conversational manner to encourage participants to share their experiences freely. Each interview lasted approximately 25–35 minutes. Interviews were audio-recorded with prior consent, transcribed verbatim, and anonymised prior to analysis.

3.4 Data Analysis Approach

Qualitative data were analysed using a thematic content analysis approach. Interview transcripts and notes were systematically reviewed and coded under predefined themes aligned with the OECD-DAC evaluation criteria, namely relevance, coherence, effectiveness, efficiency, impact, and sustainability.

An iterative coding process was followed, allowing for the identification of recurrent patterns, convergent and divergent views across stakeholder groups, and contextual factors influencing programme outcomes. The analysis emphasised cross-stakeholder validation, wherein beneficiary perspectives were examined alongside institutional and employer inputs to enhance analytical robustness.

3.5 Qualitative Findings by OECD-DAC Criteria

This section provides the analysis of qualitative data with respect to the different dimensions of impact of the project. It is important to note that this assessment of different dimensions of the impact is based on stakeholder perceptions and experiential evidence. These findings therefore provide contextual and experiential validation of relevance, which is further examined and complemented through quantitative indicators in Phase II of the impact assessment.

3.5.1 Relevance of the Project

This section examines the evaluation question: “What is the relevance of the Welding for Nation Building project from the perspectives of beneficiaries and key stakeholders ?”

Qualitative analysis indicates that the programme responds to clearly articulated and persistent needs within the regional skill development ecosystem. These needs include the lack of affordable access to quality vocational training, limited availability of industry-recognised welding

certification, and structural barriers faced by first-generation technical learners. Evidence from trainees, trainers, employers, and representatives of other vocational institutions consistently suggests that the Don Bosco–CSL initiative is well aligned with the socio-economic context and aspirations of youth from economically disadvantaged and BPL households.

i. Need for Affordable Skill Development Opportunities

Affordability emerged as a central dimension of relevance across beneficiary interviews. Trainees from low-income households reported that while welding is widely perceived as a viable trade, the cost of formal welding courses—particularly in private ITIs—acts as a major barrier to entry. Ashwal (20), from Palluruthy, who did not complete Plus Two, explained: “Most of my classmates joined ITI courses, but welding fees are very high there. It would have been out of reach for me.”

Similar accounts from other trainees indicate that, in the absence of subsidised or CSR-supported training, access to structured welding education remains limited for economically disadvantaged youth. In this context, the project’s free training model directly addresses a critical access gap, reinforcing its relevance.

ii. Need for Modern, Industry-Relevant Training Infrastructure

Another key theme relating to relevance concerned the quality and currency of training infrastructure. Trainees and institutional respondents noted that several local training providers operate with outdated equipment, limited workshop exposure, and insufficient emphasis on safety practices.

By contrast, the Don Bosco training centre was consistently perceived as offering modern facilities, structured practical exposure, and systematic safety instruction. These features were viewed as essential for preparing trainees for contemporary industrial environments and align closely with

employer expectations in sectors such as shipbuilding, manufacturing, and construction. The availability of such infrastructure enhances the programme's relevance within the regional vocational training landscape.

iii. Addressing the Needs of First-Generation Technical Learners

For many beneficiaries, the programme represented their first formal exposure to vocational or technical education. Trainees reported limited prior familiarity with industrial tools, machines, or worksite norms, highlighting the need for training environments that are both instructional and supportive.

Stakeholders emphasised that programmes targeting such learners must incorporate foundational skill-building, structured practice, and close supervision to enable effective participation. The design of the Welding for Nation Building project—characterised by guided

learning and progressive skill development—was therefore perceived as well suited to the needs of first-generation technical learners, reinforcing its contextual relevance.

iv. Shortage of trained welders in the local labour market

Employers and institutional respondents highlighted the importance of industry-recognised and internationally benchmarked certification in the welding sector. Depth interviews with potential recruiters from the industry reinforces the relevance of the welding training initiative in the local context. The Deputy General Manager of a welding and fabrication company in Kochi pointed out the acute shortage of trained welders in the region, which has limited the company's capacity to expand operations despite sufficient workload. As he explained,

“We have demand for more people and enough

work for an additional shift, but we cannot run it because there is no reliable supply of trained welders.”

This observation highlights the existing gap between industry demand and the availability of skilled manpower in welding, thereby validating the strong relevance of the Don Bosco–CSL programme in addressing a real and pressing workforce need in Kochi and Kerala.

Qualitative evidence therefore indicates that the Welding for Nation Building project demon-



strates high relevance. The programme is well aligned with the needs, constraints, and aspirations of economically disadvantaged youth, while also responding to industry demand for certified and job-ready welders. Its focus on affordability, modern training infrastructure, support for first-generation learners, and recognised certification positions it as a contextually appropriate intervention within the regional skill development ecosystem.

3.5.2 Effectiveness of the Project

This section addresses the evaluation question: “To what extent has the Welding for Nation Building project achieved its intended objectives in terms of skill acquisition, job readiness, and early employment outcomes, as perceived by beneficiaries and key stakeholders?”

Qualitative evidence from trainees, trainers, and employers indicates that the programme has been largely effective in achieving its immediate objectives. Stakeholder accounts consistently

point to successful skill acquisition, enhanced job readiness, and positive early employment outcomes, suggesting that the programme's design and delivery mechanisms translated effectively into intended results.

i. Achievement of Intended Training and Employability Outcomes

From the trainees' perspectives, completion of the programme marked a clear shift in their employability prospects. Several beneficiaries indicated that, prior to the training, they lacked marketable skills and would have struggled to secure employment. Post-training, trainees reported relatively quick transitions into work, often beginning with apprenticeships and progressing to full-time roles.

Allan, 25 years, who received training 4 years back commented, "All my friends who attended courses in other trades in a training centre (an ITC) were struggling to get regular job whereas I didn't have to wait. Joined a contract firm as a trainee before even the certification test was done"

Comparisons with peers who had completed schooling but lacked vocational skills were frequently made, reinforcing perceptions that the programme effectively addressed a critical gap between education and employment. These narratives suggest that the programme met, and in some cases exceeded, beneficiary expectations regarding employability outcomes.

ii. Effectiveness in Skill Acquisition and Competence Development

Trainees described steady improvement in welding skills through structured instruction and repeated hands-on practice. Initial difficulty in controlling equipment and precision was common, but continuous exposure helped trainees attain competence.

As Vimal recalled:

"In the beginning, my hands were not steady. But



regular practice and guidance helped me master the trade. Such training can make anyone skilled." Most trainees expressed confidence in their ability to perform welding independently after completing the programme.

iii. Effectiveness of Training Delivery and Instructional Support

The quality of training delivery emerged as a key contributor to programme effectiveness. Trainees consistently described trainers as knowledgeable, supportive, and closely involved in the learning process. The structured balance between theory and practice was viewed as appropriate and conducive to learning.

In addition to technical instruction, beneficiaries highlighted the inclusion of soft skills training, such as interview preparation, as an effective component that enhanced their readiness for employment. Safety training was repeatedly emphasised as particularly effective, contributing to trainees' confidence in handling industrial work environments.

No significant shortcomings in instructional quality or delivery methods were reported by trainees.

iv. Confidence, Professional Identity, and Work Readiness

Beyond technical outcomes, trainees reported notable improvements in confidence, discipline, and professional self-perception. Many described a transformation in how they viewed themselves; from unskilled job seekers to trained welders capable of working in demanding industrial settings.

Stakeholder validation reinforced these perceptions. Employers and trainers observed that Don Bosco-trained candidates generally demonstrated confidence and adaptability when entering the workplace, indicating effective preparation for real-world work conditions.

v. Transition to Employment and Early Workplace Performance

Trainees described a relatively smooth transition from training to employment, supported by active placement facilitation. Respondents reported exposure to multiple placement opportunities, including interactions with firms operating both within India and abroad. Some trainees from earlier batches also noted that the skills acquired enabled them to consider self-employment options.

With respect to workplace performance, trainees expressed confidence in meeting expectations related to safety, work quality, and productivity. Employers corroborated these views, reporting satisfactory entry-level performance and reduced need for extensive retraining.

A small number of trainees indicated that health-related issues—such as discomfort associated with prolonged use of safety gear—affected their ability to continue in welding roles. These were individual-level constraints rather than reflections of programme ineffectiveness.

vi. Stakeholder Validation of Effectiveness

Recruiters affirmed the technical competence of trainees recruited from the Don Bosco CSR batch. However, behavioural issues such as irregular attendance and lack of punctuality were highlighted.

As one employer observed:

“Students look happy with the weekly stipend, sometimes do not return for work for a week or so, and then report all of a sudden. They are good in their work. Attitude problem is a challenge—maybe this is a generation shift.”

This indicates that while technical effectiveness was strong, behavioural readiness remains an area for strengthening.

While overall effectiveness was perceived to be high, stakeholders identified areas for potential enhancement. Some trainees suggested greater or more advanced exposure to TIG welding, indicating a desire for deeper specialisation. These suggestions point to opportunities for incremental improvement rather than fundamental gaps in programme delivery.

The qualitative evidence indicates that the Welding for Nation Building project has been largely successful in achieving its intended objectives related to skill acquisition, job readiness, and early employment outcomes. Beneficiaries and stakeholders attributed these results to the programme’s structured training delivery, intensive practical exposure, industry-recognised certifi-



cation, and placement facilitation. At the same time, a few areas—particularly behavioural readiness for workplace discipline and the need for greater exposure to advanced welding processes—emerged as aspects that could be further strengthened to enhance overall effectiveness.

3.5.3 Impact of the Project

i. Transformational Impact on Beneficiaries’ Lives

For several beneficiaries, the programme marked a decisive turning point in their life trajectory by enabling access to a skilled profession and improved livelihood opportunities that would otherwise have remained inaccessible. Ajay, who comes from a financially modest family, is currently

employed as a welder abroad and described the training as the foundation that changed his life. He acknowledged that he would not have been able to afford welding training in regular institutes and reflected on his journey with emotion, “I can’t believe how far I have come in life. it would have been possible without the opportunity to attend the course”

His experience illustrates how the programme opened pathways to upward mobility and long-term financial stability.

ii. Social impact

The programme generated significant social impact by fostering psychological empowerment among youth from economically disadvantaged backgrounds. For many beneficiaries, securing gainful employment at a young age represented a break from economic vulnerability and social marginalisation. Trainees described increased self-confidence and a sense of dignity arising from their contribution to household income. This transition from dependency to economic participation enhanced their social standing within families and communities, reinforcing motivation, self-respect, and future aspirations.

iii. Improvement in Family Well-Being

The training and subsequent employment have had visible positive effects on beneficiaries’ families. Trainees reported being able to contribute financially to their households, support parents who previously depended on daily wage labour, and improve overall family stability. This shift strengthened their role within the family and reduced economic vulnerability, reflecting the programme’s impact at the household level.

Overall, the qualitative evidence indicates that the project has generated meaningful transformational outcomes by enabling economically disadvantaged youth to enter the labour force at an early stage, thereby contributing to productive workforce participation and the realisation of the demographic dividend. Through access to skilled employment, beneficiaries experienced economic mobility, developed professional confidence, and enhanced the well-being of their families, highlighting the project’s broader social and developmental impact beyond individual livelihoods.

IV. Quantitative Data Analysis - Beneficiaries Survey

To complement the qualitative inquiry and furnish quantifiable evidence regarding programme outcomes, a structured survey was administered to beneficiaries of the Welding for Nation Building project. The objective of this phase was to assess trainees' socio-economic background, training experience, certification outcomes, and employment status after course completion. The sampling frame encompassed 302 trainees documented in the official records maintained by Don Bosco across successive project phases. All enumerated beneficiaries were contacted; nonetheless, responses were secured from only 123 individuals owing to obsolete contact details, geographic relocation, or non-responsiveness. Data were gathered via telephone interviews employing a pre-tested, structured questionnaire engineered to elicit uniform responses pertaining to training pertinence, participant satisfaction, skill acquisition, and placement efficacy. The findings presented in this chapter are based on the responses obtained from these 123 beneficiaries and provide quantitative validation of the project's reach and effectiveness.

4.1 Sample Profile

Table 4.1 Sample profile

Gender profile of respondents		Age Profile	
Male	123	20-25	59
Female	0	25-30	50
Others	0	30-35	12
		Above 35	2
Caste		Education Profile	
General	5	Below 10th	1
OBC	59	Completed 10th	43
SC/ST	21	Completed +2	63
OEC	4	Diploma	8
Others	30	Other	8
		Monthly family Income	
		Below ₹10,000	11
		₹10,000-20,000	75
		₹20,000-30,000	36
		Above ₹30,000	1

The respondent profile indicates that the project has predominantly reached young male beneficiaries from economically and socially disadvantaged backgrounds. Most trainees fall within the early working-age groups, highlighting the programme's relevance for employability-focused youth. The caste distribution shows strong participation from OBC, SC, and ST communities, reflecting effective targeting of marginalized groups. Educationally, the majority possess basic schooling up to Plus Two or 10th standard, suggesting that the programme caters largely to first-generation vocational learners with limited prior technical exposure. The family income pattern further confirms that beneficiaries primarily belong to low-income households, validating the project's alignment with its objective of supporting BPL youth and enhancing their livelihood opportunities through skill-based intervention.

4.2 Certification Status of Trainees

A large majority of respondents reported that they received formal certification upon completion of the welding course. Out of the 123 trainees surveyed, 110 were certified, while only 13 did not obtain certification. This high certification rate indicates strong compliance with programme requirements and reflects the effectiveness of the training centre in ensuring that most trainees successfully complete both the course and the qualification assessment.

4.3 Welding Skill Self-Efficacy Among Trained Beneficiaries



Fig 4.1 Perceived self-efficacy

Survey responses indicate an exceptionally high level of perceived welding competence among programme beneficiaries. A dominant majority of respondents (98.4%) reported being very confident in carrying out welding tasks independently after completion of the course. Only a marginal proportion expressed moderate confidence (0.8%), while an equally small percentage (0.8%) indicated lack of confidence. These findings show that the training has been highly successful in building strong technical self-efficacy and readiness among the vast majority of trainees to undertake welding work on their own.

4.4 Perceived Utility of Certification

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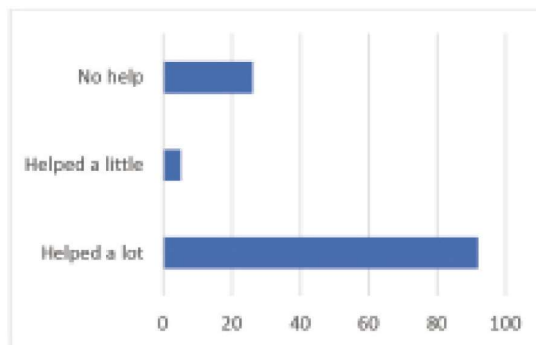


Fig 4.2 Perceived Utility

This question was included to understand whether obtaining formal certification from the welding course contributed to trainees' ability to secure employment and to assess the perceived practical value of certification in improving their job prospects. Among the respondents who received certification through the welding training, a substantial number acknowledged its role in improving their employment prospects. Out of the 123 trainees surveyed, 92 reported that the certificate helped them significantly in finding a job, indicating that formal recognition of skills was a major enabler of employability. Five respondents felt that the certificate offered only limited support, while 26 trainees stated that the certificate did not help them secure employment. The responses suggest that although certification has been a strong facilitating factor for the majority, a notable section did not experience direct job benefits, pointing to the influence of other factors such as local job availability, migration constraints, or limited awareness among employers in certain sectors.

4.5 Alignment of Course Content with Local Employment Opportunities

The responses indicate a near-unanimous agreement among beneficiaries that the welding course was well aligned with local labour market requirements. Out of the 123 trainees surveyed,

122 affirmed that the course content matched local job opportunities, demonstrating that the training curriculum is highly relevant to industry demand in the region. This strong alignment suggests that the programme has been designed with a clear understanding of market needs, thereby enhancing trainees' employability and readiness for available welding-related roles.

4.6 Geographical Distribution of Employment After Training

The post-training employment pattern shows that the majority of placed trainees are currently working within Kerala, with 100 out of 123 respondents reporting local employment across different districts. A smaller segment has migrated for work, with seven respondents employed abroad in locations such as Dubai, Abu Dhabi, Russia, and the United States, while six trainees reported placements in other Indian states. Ten respondents did not provide details regarding their work location. The distribution suggests that the programme primarily contributes to strengthening the local skilled workforce, while also enabling a limited number of trainees to access interstate and international employment opportunities.

Location	Number	Percent
Kerala (combined)	100	81.3
Abroad (Dubai, Abu Dhabi, Russia, US)	7	5.7
Other Indian states	6	4.9
No response	10	8.1
Total	123	100

Table 4.2 Job Location of trainees

4.7 Employment Status of Trainees After Course Completion

The employment data reveal that more than half of the respondents (64 trainees) have secured permanent jobs in welding, indicating strong placement outcomes from the programme. Fourteen trainees reported being self-employed in welding-related activities, reflecting the project's role in promoting livelihood generation beyond formal employment. However, 15 respondents remain unemployed, while 30 trainees are engaged

in jobs outside the welding sector. These findings suggest that although the programme has been effective in enabling direct entry into welding careers for a majority, a notable proportion has either diversified into other occupations or is yet to achieve employment.

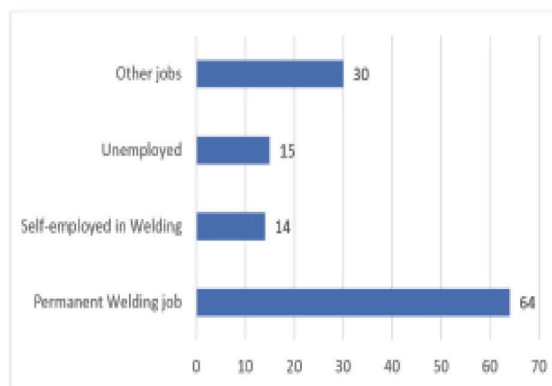


Fig 4.3 Employment Status

4.8 Trainee Satisfaction Across Key Service Parameters

Trainees were asked to rate various aspects of the welding programme using a four-point scale ranging from 1 to 4, where 1 represents Poor, 2 represents Fair, 3 represents Good, and 4 represents Excellent. The mean scores presented below therefore reflect the overall satisfaction level of beneficiaries across different service dimensions of the training programme.

4.9 Infrastructure & Learning Resources

This dimension received very high ratings from trainees, with tools, facilities, safety measures, and training materials all scoring close to the maximum value. The high scores indicate that beneficiaries were extremely satisfied with the quality and availability of equipment, workshop infrastructure, and safety provisions. The results suggest that the programme provides a well-resourced and industry-relevant practical training environment.

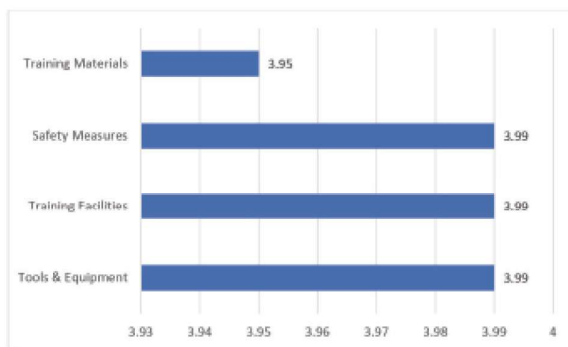


Fig 4.4 Infrastructure & Learning Resources
4.10 Training Delivery & Curriculum

Faculty support under this dimension received the highest possible mean score, indicating that trainees perceived the trainers as highly competent, approachable, and supportive throughout the programme. The mean score for theory–practical integration also reflects a generally positive perception among trainees, suggesting that they were satisfied with the way theoretical inputs were linked with hands-on welding practice during the training.

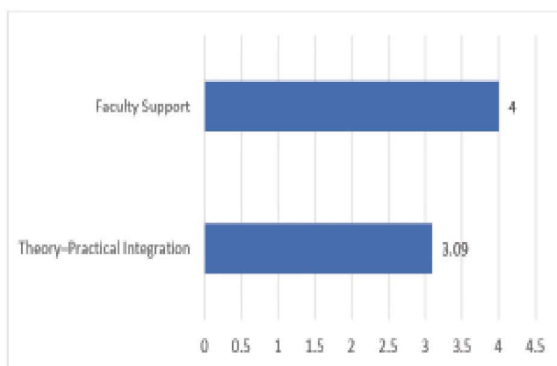


Fig 4.5 Training Delivery & Curriculum
4.11 Assessment & Administration

Trainees reported high satisfaction with the admission process, training schedule, assessment procedures, and inclusivity practices. The perfect mean score for inclusivity suggests that beneficiaries consistently perceived equal treatment and fairness within the training environment.

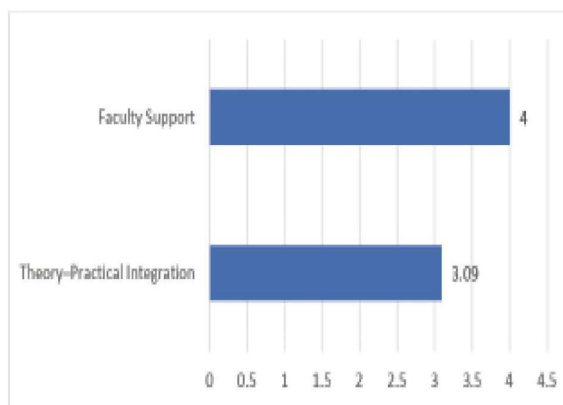


Fig 4.6 Assessment & Administration
4.12 Employability Support

Trainees held positive perceptions regarding the usefulness of soft skills training in improving their workplace readiness. Placement support, while still rated above the mid-point, showed comparatively lower mean values, indicating varied trainee experiences in employment facilitation after training.

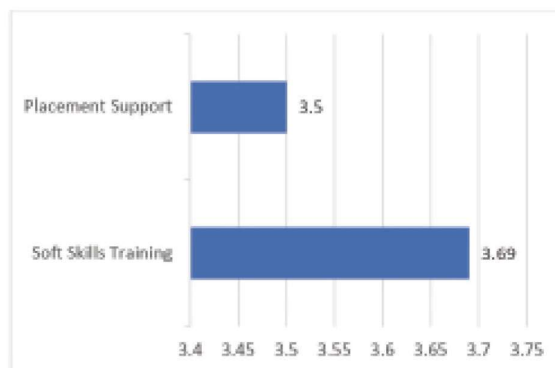


Fig 4.7 Employability Support
4.13 Barriers Faced by Trainees in Pursuing Welding Careers

Out of the 123 respondents, 109 reported that they did not face any obstacles in continuing or pursuing welding-related employment after training. However, 11 trainees indicated low wages as a barrier that discouraged them from taking up or continuing welding jobs, while 3 respondents cited health issues that prevented them from working in welding. The responses suggest that most beneficiaries were able to transition into the workforce without major

difficulties, though a small segment encountered wage-related and health-related challenges.

4.14 Post-Training Follow-up Support Provided by Don Bosco

The survey responses show that a majority of trainees received continued support from Don Bosco even after course completion. Out of 123 respondents, 91 reported receiving job leads, indicating active efforts by the centre to connect beneficiaries with employment opportunities. Twenty-seven trainees stated that they received mentorship or guidance after training, while two respondents mentioned direct placement support from Don Bosco. Only three respondents reported that they did not receive any form of follow-up assistance. These findings reflect trainees' perception that Don Bosco maintained engagement with most beneficiaries beyond the training period, particularly through job-related information and mentoring support.

4.15 Overall Satisfaction with the Welding Course
The overall satisfaction ratings indicate a highly positive perception of the training programme among beneficiaries. Out of 123 respondents, 100 rated the course as excellent, 14 rated it as good, and 9 indicated a fair level of satisfaction, while none rated the course as poor. The mean satisfaction score of 3.7 (on a four-point scale) reflects that trainees were largely satisfied with the course and perceived the training experience as beneficial and well-delivered.

4.16 Perceived Improvement in Quality of Life and Family Wellbeing

Responses to this question reflect trainees' perceptions regarding changes in their overall life situation after completing the welding training. Out of the 123 respondents, 61 reported that their quality of life had improved excellently, indicating substantial positive change in personal and family wellbeing. Fourteen respondents perceived good improvement, while 17 indicated a fair level of change. However, 14 trainees felt that there was poor improvement in their quality of life. Eighteen respondents did not provide an answer to this question. Overall, the responses suggest that a considerable number of beneficiaries experienced noticeable positive changes

in their living conditions and family wellbeing following the training and employment opportunities.

4.17 Perceived Improvement in Social Perception

The responses indicate varied perceptions among trainees regarding changes in the way they are viewed socially after completing the welding course. Out of 123 respondents, 48 reported an excellent improvement in social perception, suggesting that acquiring a certified technical skill enhanced their recognition and respect within their community. Nine respondents indicated good improvement, while 19 perceived a fair level of change. However, 23 trainees felt that there was poor improvement in their social standing, and 24 respondents did not provide a response. These findings reflect that although a substantial number of beneficiaries experienced positive social recognition after training, the perceived social impact was not uniform across all trainees.

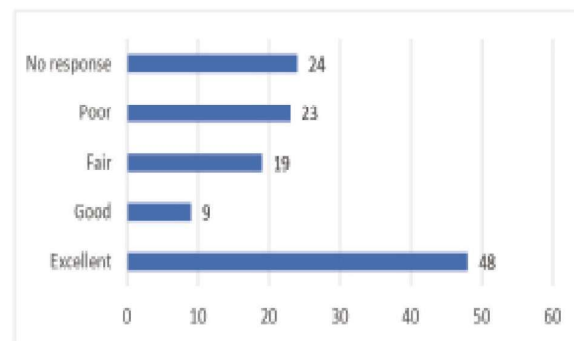


Fig 4.8 Social Perception

4.18 Programme Advocacy by Beneficiaries

The responses demonstrate a very strong endorsement of the welding programme by the beneficiaries. Out of 123 trainees surveyed, 121 stated that they would definitely recommend the course to others, reflecting high levels of satisfaction and perceived value.

Only one respondent expressed uncertainty by selecting "Maybe," and one respondent indicated that they would not recommend the course. The overwhelming positive response suggests that trainees largely view the programme as beneficial and worthwhile for other prospective learners.

V. Impact Assessment of the Project

Based on the evidence generated from both the qualitative and quantitative phases of the study, this section provides a consolidated assessment of the CSR project's impact. The analysis is guided by the OECD-DAC evaluation framework outlined earlier in chapter III the report.

5.1 Relevance

The relevance criterion examines the extent to which the project's objectives and activities correspond to the actual needs and priorities of the intended beneficiaries and the socio-economic context in which the intervention is implemented. The primary objective of the Welding for Nation Building CSR project is to provide industry-relevant welding training and certification to youth from economically disadvantaged and BPL households in Kerala, thereby enhancing their employability and livelihood opportunities. Both qualitative and quantitative findings strongly indicate that the programme is highly relevant to the needs of the target population and the regional labour market.

A key factor underscoring the relevance of the project is the lack of affordable access to quality welding training for youth from low-income families. Interviews with trainees revealed that welding courses offered by private ITIs and training centres involve high fees, making them inaccessible to economically vulnerable youth. Many respondents reported that although welding is perceived as a promising trade, financial constraints prevented them from enrolling in formal courses elsewhere. The CSR-supported free training provided by Don Bosco therefore directly addresses a critical barrier to skill acquisition among BPL youth.

The programme is also relevant in addressing the needs of first-generation technical learners. A large proportion of trainees come from families with

limited educational and occupational exposure, and many had discontinued schooling before higher secondary or lacked opportunities for vocational education. The structured, hands-on training model, combined with close trainer support, is perceived by beneficiaries as appropriate for their learning needs and capability levels. Quantitative data further confirms that the project has largely reached youth from socially marginalized communities and low-income households, validating alignment with the intended beneficiary profile.

Relevance is further strengthened by the alignment of the course content with local employment opportunities. Survey results show that almost all respondents perceived the training to be closely matched with available welding-related jobs. This is particularly significant in the context of Kerala, and especially Kochi where rapid urbanization and growth in infrastructure and construction activities have created sustained demand for skilled welding workers. The qualitative interactions with recruiters also affirmed the continuing need for trained welders in industry, reinforcing that the programme is demand-driven rather than supply-led.

In addition, the emphasis on internationally recognised certification enhances the practical relevance of the programme. Employers value certified welders, and trainees acknowledged that certification increases their chances of employment in both local and overseas markets. The integration of placement and follow-up support further aligns the project with beneficiaries' livelihood aspirations.

Overall, the project demonstrates high relevance by responding to the unmet need for affordable technical training among BPL youth, addressing barriers faced by first-generation learners, aligning with strong regional demand for welding skills driven by urban and construction growth, and incorporating

certification and employability-focused features valued by both trainees and industry.

5.2 Coherence

Coherence, as defined under the OECD-DAC framework, refers to the extent to which an intervention aligns with existing national priorities, sectoral initiatives, and broader developmental objectives, while complementing rather than duplicating ongoing efforts. The Welding for Nation Building project demonstrates strong coherence with India's skill development agenda as well as regional labour market dynamics in Kerala.

At the national level, the project aligns closely with the Skill India Mission and the National Skill Development Policy, both of which emphasise enhancing employability among youth through industry-relevant vocational training and recognised certification. By focusing on economically disadvantaged youth, many of whom are school dropouts or first-generation technical learners, the programme complements skilling efforts aimed at expanding workforce participation among vulnerable populations.

Sectorally, welding is a critical trade supporting several industrial sectors such as infrastructure, fabrication, shipbuilding, and construction industries. The project's stated objectives are therefore coherent with industry expectations and national priorities to build a skilled technical workforce capable of meeting industrial demand.

The programme is also highly coherent with the regional economic context of Kochi and Kerala. Kochi has emerged as one of the fastest-growing urban centres in the state, with rapid expansion in infrastructure and a sustained boom in the construction and allied sectors. This urban growth has created increasing demand for skilled welding workers across fabrication, structural work, and industrial projects. By training BPL youth specifically in welding, a trade directly linked to these expanding sectors, the project demonstrates alignment with local employment opportunities and regional labour market needs.

From the corporate perspective, the initiative aligns well with Cochin Shipyard Limited's CSR focus on livelihood creation in sectors connected to its core industrial domain. Supporting welding skill development not only strengthens the local workforce supply for industries related to shipbuilding and fabrication but also reflects strategic coherence between CSL's business ecosystem and its social investment priorities.

Overall, the project shows strong coherence through its alignment with national skill development policies, responsiveness to regional industry demand driven by urban and construction growth in Kerala, and synergy with CSL's broader CSR objectives.

5.3 Effectiveness

The effectiveness of the Welding for Nation Building project is assessed in terms of the extent to which the programme has achieved its intended objectives related to skill acquisition, certification, employability, and beneficiary satisfaction. An integrated analysis of both quantitative survey findings and qualitative stakeholder insights indicates that the project has been largely effective in translating training inputs into meaningful outcomes for the targeted youth.

A key indicator of effectiveness is the high completion and certification rate among trainees. Out of 123 beneficiaries surveyed, 110 reported receiving formal welding certification. For the majority, this certification directly facilitated employment, with 92 trainees stating that the certificate helped them significantly in securing jobs. Qualitative feedback from employers reinforces this finding, as recruiters expressed greater confidence in hiring Don Bosco trainees due to their ISO-based certification and structured training background. The programme has also been effective in building strong technical competence and confidence. Survey results show that 121 trainees felt very confident in performing welding independently after completing the course. This quantitative evidence is strongly supported by trainee narratives describing how continuous hands-on practice, access to machines, and trainer guidance enabled them to overcome initial difficulties

and gain mastery over welding processes. Trainers also observed steady skill progression among students despite their limited prior exposure to technical work.

Effectiveness is further reflected in employment outcomes aligned with the training. A substantial proportion of respondents transitioned into welding-related livelihoods, with 64 securing permanent welding jobs and 14 entering self-employment. Nearly all trainees confirmed that the course content matched local job opportunities, demonstrating that the programme effectively linked training delivery with labour market demand. Employers corroborated that trainees possessed acceptable entry-level readiness and strong safety practices.

High levels of beneficiary satisfaction also indicate effective programme delivery. Trainees rated infrastructure, tools, safety measures, faculty support, assessments, and administrative processes positively, and 100 respondents evaluated the course overall as excellent. Qualitative feedback similarly highlighted the supportive teaching approach, structured curriculum, and relevance of both theory and practical components. Placement and follow-up support contributed to effectiveness beyond course completion. Most respondents reported receiving job leads and mentoring from Don Bosco, and qualitative accounts confirmed that trainees were regularly informed about employment opportunities even after training.

Although a small segment remained unemployed or shifted to other occupations, and some cited low wages or health-related constraints, the combined evidence suggests that the project has been effective in achieving its core objectives of equipping economically disadvantaged youth with industry-relevant welding skills, certification, and pathways to employment.

5.4 Efficiency

Efficiency under the OECD-DAC framework refers to the extent to which project resources have been utilised economically and optimally to generate intended outputs and outcomes. In the absence

of direct financial or cost-benefit data, efficiency in this assessment is derived indirectly from qualitative stakeholder evidence and selected quantitative indicators related to training intensity, resource utilisation, and employment conversion.

A key indicator of efficiency emerging from trainee and institutional interviews relates to cost advantage and accessibility. Beneficiaries consistently reported that welding courses offered by private ITIs and training centres involve high fees, which would have made enrolment inaccessible for youth from low-income households. The CSR-supported model therefore enabled the delivery of specialised welding training and certification without financial burden to beneficiaries, indicating strong value derived from CSR investment.

Qualitative evidence further highlights efficient utilisation of training infrastructure. Trainees reported continuous and unrestricted access to welding machines, contrasting with limited exposure in many conventional institutes. Trainers also confirmed that structured practice schedules minimised idle time and enabled trainees to achieve functional competence within the stipulated 600-hour training duration.

Efficiency is additionally reflected in employer feedback. Recruiters reported that Don Bosco-trained welders demonstrated satisfactory practical skills and safety awareness, reducing the need for extensive post-recruitment training. The presence of ISO-based certification further enhanced employer confidence and facilitated quicker workplace integration, indicating effective conversion of training inputs into job-ready skills.

Comparative insights from other welding training institutions reinforced these observations, as coordinators acknowledged constraints related to infrastructure, equipment availability, and limited practical exposure. In contrast, the Don Bosco-CSL programme was perceived as offering more intensive and resource-efficient training.

Overall, while efficiency cannot be measured directly through financial metrics in this study, the

integrated qualitative and quantitative evidence suggests that the project has functioned efficiently by maximising training intensity, optimising use of infrastructure, reducing employer retraining requirements, and delivering industry-aligned skills within a short training cycle at no cost to economically disadvantaged youth.

5.5 Impact

The impact assessment examines the broader and longer-term changes brought about by the Welding for Nation Building project in the lives of beneficiaries and their families, beyond immediate training and employment outcomes. Evidence from the qualitative phase, supported by quantitative indicators, suggests that the project has generated meaningful socio-economic and psychosocial impact by enabling economically disadvantaged youth to enter skilled employment pathways and participate productively in the labour force.

A key dimension of impact relates to livelihood transformation and economic mobility. For many beneficiaries from BPL and low-income households, access to structured welding training and recognised certification represented a decisive shift away from precarious or informal work towards stable and skilled livelihoods. In some cases, this transition extended to employment beyond local and national labour markets, reflecting enhanced mobility and long-term earning potential. Beneficiary narratives indicate that such opportunities would have been unattainable without the CSR-supported intervention, underscoring the project's role in overcoming structural barriers to skill acquisition and employment.

The project has also had a significant social impact, particularly in terms of empowerment and professional identity formation among youth from economically constrained backgrounds. Early entry into skilled employment contributed to increased self-confidence, dignity, and a sense of purpose, as beneficiaries experienced recognition as trained professionals and earning members within their families and communities. At the household level, the project's impact is reflected in improved fam-

ily well-being and financial stability. Beneficiaries reported being able to contribute to household income, support parents engaged in low-wage occupations, and reduce economic vulnerability. These changes enhanced beneficiaries' roles within their families and generated positive spillover effects, highlighting the multiplier impact of skill-based livelihood interventions.

From a developmental perspective, by facilitating early labour force participation among economically disadvantaged youth, the project contributes to human capital formation and the effective utilisation of the demographic dividend. The integration of trained youth into skilled employment supports inclusive economic growth and addresses industry demand for certified technical workers. Overall, the evidence indicates that the Welding for Nation Building project has generated substantive and sustained impact at individual, household, and societal levels, extending well beyond immediate training outputs to create pathways for long-term socio-economic advancement.

5.6 Sustainability

The sustainability assessment examines the likelihood that the benefits generated by the Welding for Nation Building project will be sustained over time beyond the period of direct CSR support. Evidence from both qualitative and quantitative phases indicates that the project demonstrates strong sustainability potential at the beneficiary, institutional, and labour market levels.

At the beneficiary level, sustainability is reflected in the durable and transferable nature of the skills acquired through the programme. Welding skills remain relevant across multiple sectors such as construction, fabrication, and shipbuilding, allowing beneficiaries to adapt to changing employment contexts. The high levels of self-confidence and ability to perform welding tasks independently reported by trainees indicate that beneficiaries are not dependent on continued institutional support to remain employable. Entry into permanent employment or self-employment further strengthens the likelihood that livelihood gains will be sustained over time.

From an institutional perspective, the project's sustainability is reinforced by its alignment with industry demand and the long-term relevance of welding as a skilled trade. Employer feedback also suggests that the demand for trained welders is sustained, particularly in regions experiencing ongoing infrastructure and construction activity. This continued demand reduces the risk of skill obsolescence and supports long-term employability of beneficiaries.

At the same time, certain factors may influence the sustainability of outcomes. Behavioural challenges such as irregular attendance and workplace discipline, as noted by employers, could affect long-term employment retention if not adequately addressed. Strengthening behavioural orientation and work-readiness components would further enhance the sustainability of outcomes.

Overall, the evidence indicates that the Welding for Nation Building project has strong sustainability potential, driven by transferable skills, early labour market integration, and continued industry demand. With incremental strengthening in behavioural readiness and career progression support, the benefits of the project are likely to endure and generate sustained socio-economic outcomes for beneficiaries and their families.

Conclusion

This impact assessment study was undertaken with the objective of evaluating the outcomes and broader socio-economic impact of the Welding for Nation Building CSR project implemented by Cochin Shipyard Limited in partnership with Don Bosco Tech. The project was conceived with the aim of enhancing employability and livelihood opportunities for youth from economically disadvantaged and BPL households in Kerala through industry-relevant welding training and certification. The evaluation applied the OECD-DAC framework, encompassing the six dimensions of Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability, to comprehensively assess the project's performance. A mixed-methods approach combining qualitative interviews with

beneficiaries, trainers, employers, and other training institutions, along with a structured beneficiary survey, was adopted to generate evidence for the assessment.

Based on the integrated analysis of qualitative and quantitative data, the study concludes that the project scores high on relevance and coherence. The intervention addresses a clearly articulated need for affordable, quality welding training among economically disadvantaged youth who face financial and structural barriers to accessing formal vocational education. The strong alignment of the course content with local and regional labour market demand, particularly in the context of Kerala's expanding construction, fabrication, and industrial sectors, further reinforces its relevance. The project also demonstrates high coherence through its alignment with national skill development priorities and its strategic fit with Cochin Shipyard Limited's CSR focus on livelihood creation within its core industrial domain.

On the effectiveness dimension, the project has proven successful in achieving its intended objectives related to skill acquisition, certification, job readiness, and early employment outcomes. High completion and certification rates, strong levels of trainee confidence, positive employment transitions, and high overall satisfaction reflect the effectiveness of the training design and delivery. Employer feedback further validates the technical competence and workplace readiness of trainees, while also identifying limited behavioural gaps that present opportunities for further strengthening rather than fundamental shortcomings.

The evaluation also finds that the project demonstrates efficiency in resource utilisation. Qualitative evidence indicates that the CSR-supported training model delivers high-quality, industry-aligned welding skills at no financial cost to beneficiaries, compared to expensive private alternatives. Intensive use of training infrastructure, structured practical exposure, use of advanced learning tools, and reduced retraining requirements for employers collectively indicate efficient conversion of inputs into employable skills within a relatively short training cycle.

In terms of impact, the project has generated meaningful and multidimensional outcomes extending beyond immediate employment. Beneficiaries experienced significant livelihood transformation, psychological empowerment, and improved family well-being as a result of early entry into skilled employment. By enabling economically disadvantaged youth to participate productively in the labour force, the project contributes to social inclusion, household economic stability, and the effective utilisation of the demographic dividend.

With respect to sustainability, the evaluation indicates strong potential for the continuity of benefits generated by the project. The acquisition of transferable welding skills, recognised certification, sustained industry demand, and institution-

al alignment support long-term employability of beneficiaries. While behavioural readiness and retention in employment remain areas requiring continued attention, these do not undermine the overall sustainability of outcomes and can be addressed through incremental programme strengthening.

In conclusion, the Welding for Nation Building project emerges as a well-designed and impactful CSR intervention that effectively translates skill development into sustainable livelihood outcomes for economically disadvantaged youth. The project demonstrates strong alignment with beneficiary needs, industry demand, and broader developmental objectives, and offers a robust model for CSR-driven skill development with potential for replication and scale.

