

NPC Consultant Professional Profile

I. Personal Information

Name: M Natarajan

Current Position & Domain: Director, Technology Management & Energy Management

Office Location: AIP, NPC Chennai.

Languages: Tamil (Proficient), English (Proficient), Hindi (Conversational).

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II. Professional Summary

With 26 years of experience in consultancy and training, I specialize in Technology Management, Operations Management, General Management, Safety Engineering, and Productivity Enhancement. My expertise encompasses process optimization, financial management, maintenance management systems, analytics, HAZOP/HAZAN, safety audits, and energy efficiency — with a strong focus on cost reduction and productivity improvement through strategic initiatives and operational excellence.

I have successfully guided multidisciplinary teams in executing complex projects on time and within budget, driving operational improvements, enhancing safety, and contributing to sustainable business growth.

III. Areas of Expertise

Primary Domains: Operations Management, Maintenance Management, Predictive Analytics, Financial Management, General Management, Safety Engineering & Energy Management.

Specialized Skills: Process Optimization, Lean Manufacturing, Supply Chain Management, Inventory Management, Maintenance System Improvement, Condition Monitoring, Safety Audits, Management Science, Financial Analysis, & Data Analytics.

Industry Focus: Manufacturing, Engineering, Process Industry (Power Plants, Fertilizer), Steel Rolling Mills, Transportation & Logistics, Health Care, MSMEs & Service Industry.

IV. Professional Experience

Current Position: Director **Organisation:** National Productivity Council, Chennai **Duration:** July 2019 – Till date

Key Responsibilities:

- Managed multiple consultancy projects simultaneously involving multi-disciplinary project teams with three-dimensional focus on critical success factors viz. Time, Quality & Cost.
- Specific areas of consultation /expertise:
 - ✓ Led the "Performance Assessment and Business Evaluation Study" across Common facility Centers (CFCs) in Tiruvallur, Kancheepuram, and Krishnagiri, providing recommendations to enhance operational efficiency. This study focused on productivity, financial health, machine utilization,

service structuring, and annual report analysis. It also involved formulating a business plan to enhance the performance of the CFCs.

- ✓ Carried out energy audits, and studies for verification of data for BEE Star and Shunya ratings of buildings.
- ✓ Delivered specialized sessions on “Financing for Renewable Energy”, “Data Analytics Applications in Renewable Energy”, “ISO 50001” “Electrical Systems”, “Energy efficiency in Electric Motors”, “Concepts of Takt Time and Cycle Time”, & “Cycle Time Reduction Techniques” in the international ITEC Training Programmes for the participants from various countries conducted during 2021- 2024.
- ✓ Delivered specialized training programmes on “Communication Skills,” “Maintenance Management,” and “Reliability” for scientists and engineers at Satish Dhawan Space Centre (SDSC), Sriharikota.
- ✓ Leadership and team management aspects: Managed the sixth examination for boiler inspection and certification across five centers, ensuring timely and efficient execution.

Previous Position: Deputy Director **Organisation:** National Productivity Council, Chennai **Duration:** April 2009- June 2019

Key Responsibilities:

- Managed cross-functional consultancy projects, focusing on enhancing operational efficiency, improving energy efficiency, advancing safety measures, and driving organizational restructuring initiatives.
- Specific areas of work/expertise: Operations Management, Safety Audits, Energy Audits, Production Norms Studies, Lean Manufacturing, Consultancy for implementation of OHSAS 18001 & ISO 50001, Consultancy for implementation of 5S, Organization Restructuring, Framing of Promotion Policies and Pay scales, Preparation of HR Manual, Maintenance System Studies, Lube Oil Audits & Energy Efficiency Improvement Studies.
- Leadership and team management aspects:
 - **Operational Excellence:** With expertise in driving operational improvements, I have consistently delivered impactful results through the implementation of best practices in lean manufacturing, energy efficiency, and safety. I have a proven track record of optimizing processes, reducing costs, and boosting productivity by leading continuous improvement initiatives that align with organizational goals. By leveraging a data-driven approach and fostering a culture of excellence, I have successfully enhanced operational efficiency and delivered sustainable business outcomes.
 - **Change Management and Organizational Development:** Spearheaded organizational restructuring initiatives, formulating and implementing critical policies and systems — including OHSAS 18001, ISO 50001, HR manuals, and maintenance management frameworks — thereby streamlining processes and enhancing operational alignment with evolving business objectives across various organizations.
 - **Cross-Functional Expertise:** Led and contributed to a broad range of projects, including organization restructuring, maintenance systems improvement studies, safety audits, and energy efficiency improvement studies showcasing a systematic approach in driving diverse operational improvements. Have also conducted numerous training programs on topics like Spare Parts Management, World Class Maintenance Management, Centrifugal pumps – Operation and Effective Maintenance, and Information Security & Ethical Hacking.

Previous Position: Deputy Director **Organization:** National Productivity Council, Bangalore **Duration:** July 2006 – March 2009

Key Responsibilities:

- Led Plant Engineering studies and contributed to Industrial Engineering projects, ensuring high-quality deliverables.
- Specialized in production norm setting, organizational restructuring, safety audits, lean manufacturing, Six Sigma, and TPM implementation.
- Delivered multiple consultancy assignments focused on optimizing production norms, improving organizational efficiency, and enhancing workplace safety.

Previous Position: Assistant Director **Organisation:** National Productivity Council, New Delhi **Duration:** Oct 1998 – July 2006

Key Responsibilities:

- Contributed to consultancy assignments in maintenance audits, spare parts system improvement studies, energy audits, HAZOP/HAZAN studies, fire drills, TPM implementation, and safety audits.
- Specialized in condition monitoring techniques — including vibration analysis, shock pulse monitoring, and infrared thermal imaging — along with expertise in safety audits, maintenance audits, and energy audits.
- Played a pivotal role in implementing Total Productive Maintenance (TPM) at NTPC Badarpur, leading to improved equipment reliability and productivity.
- Designed and delivered specialized training programs on Spare Parts Management, Modern Maintenance Management, Tribology, Condition Monitoring, and Computerised Maintenance Management Systems (CMMS).

V. Major Project Experience in NPC

Project Title: 1) Lube Oil Audit

Client Name: GMR Warora Energy Limited, Warora **Type:** Private Organization **Sector:** Thermal Power Plant

Role: Team Leader

Duration: Three weeks

Overview:

Led a comprehensive lubrication audit to assess and optimize the lubrication management system across the plant and its utilities. The study focused on lubricant storage and handling, existing management practices, lubricant surveys, consumption tracking, inventory control, and standardization, with the aim of improving efficiency and reducing costs.

Key Recommendations:

- Rationalized the codification of lube oils and greases to prevent mismatches and minimize excess inventory.
- Introduced a new storage plan to support FIFO (First-In, First-Out) and standardized lubricant usage across the plant.
- Proposed reducing lube oil inventory by ₹17.38 lakhs and managing leftover project lubricants to lower costs.
- Recommended grouping equivalent oil brands for the same application and establishing a centralized condition-monitoring cell.

Impact Created:

- The overall lubrication costs at the plant were reduced by 10%, demonstrating a significant improvement in cost-efficiency.

Project Title: 2) Performance Study of CFCs in Tamil Nadu.

Client Name: TANSIDCO, Chennai. **Type:** Government Organization **Sector:** MSME

Role: Team Leader

Duration: Three Months

Overview:

Led a detailed performance evaluation of CFCs located in Tiruvallur, Kancheepuram, and Krishnagiri to assess their ability to achieve operational and strategic goals. The study aimed to identify operational bottlenecks, improve resource utilization, and recommend strategies for long-term sustainability.

Key Recommendations:

- Introduced internal audit mechanisms to ensure operational accountability and performance tracking.
- Suggested targeted marketing strategies to enhance visibility and customer base.
- Recommended optimizing machinery utilization and reducing conversion costs to improve profitability.
- Proposed measures to improve the Debt Service Coverage Ratio (DSCR) and enhance revenue generation to support future debt obligations.

Impact:

- Identified the root causes of one CFC becoming a Non-Performing Asset (NPA) and provided actionable recovery strategies.
- Delivered recommendations that improved productivity, increased operational efficiency, and enhanced revenue potential for long-term viability.

VI. Educational Background

- i. B.E (Electrical & Electronics Engineering) from Bharathidasan University, Tiruchirappalli.
- ii. P.G. Diploma in Plant Engineering from Dr. Ambedkar Institute of Productivity, National Productivity Council, Chennai.
- iii. MBA from Indian Institute of Management, Trichy.
- iv. The course on Predictive Analytics offered by IIM Bangalore.

Additional Professional Qualifications:

- Lead Auditor OHSAS 18001.
- Lead Auditor ISO 50001.
- Proficient in MS Office 2016 and Windows 11.

VII. Speaking Engagements:

- Delivered a presentation on “Techniques of Productivity Measurement” in the workshop on “Measuring Productivity in Higher Education” conducted by National Institute of Technology, Trichy, in Sep 2016.
- Delivered a presentation on “Marketing of Defence Products” for Ordnance Factories at the Ordnance Factory Institute of Learning, Avadi in February 2021.
- Presented on “Productivity” in the conference on “Productivity and Sustainability-Knowledge and Skill Paradigms for Educators and Young Engineers” held at Dr MGR University in December 2023.

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that I shall be responsible for any wilful misstatement described herein.

Date: 24th July 2025

Place: Chennai

M Natarajan