

Enabling
Competitiveness in
Apparel Sector &
Launch of
Compendium for
Good Management
Practices



Learning's from industry initiatives and experiences

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IMPORTANCE

Domestic Textile and Apparel Industry

- It contributes 2% to India's GDP
- It accounts for 10% of industrial production
- It leads to 27% of the country's foreign exchange inflows and 11% of the country's export earnings.
- It employs 45 mn people in India is the second only to the agriculture sector in terms of employment.
- FDI in the Textiles & garments industry has reached up to \$ 3.1 bn during 2018-19
- Exports in the Textiles & garments industry are expected to reach \$ 300 bn by 2024

CHALLENGES

Domestic Textile and Apparel Industry

- Scale of Garment Manufacturing – Industry is fragmented into organized and unorganized sector.
- Seasonality - manufacture only certain product categories
- Inadequate capability in the synthetic value chain
 - Shift in demand from cotton & synthetic products (fiber, yarn and fabric) to value added products like apparel.
- Limited number of preferential trade agreements
 - Generalized System of Preferences (GSP) by EU countries with Least Developed Countries (LDC) like Bangladesh, Sri Lanka, etc.
 - The African Growth and Opportunity Act (AGOA) between African countries and US.

Productivity Approach



Training



Tools & Techniques



Negotiation

Training - Capacity Building

- Skilling of entry level workforce and Up skilling of regular workforce of handicrafts, handlooms, sericulture, jute and technical textiles sectors - on job training, class room training, visual based training, etc.
- Vocational Training - By Govt. of India
 - Integrated Skill Development Scheme (*ISDS*)
 - Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)/ AAJEEVIKA
 - Pradhan Mantri Kalyan Vikas Yogna (PMKVY)
- Management Development Programs/Certificate Program – Lean Manufacturing, WIP control, engineering of the workstations, etc.
 - Project Planning and Management
 - Soft-skill Training – Communication Skills, Stress and Time Management, Team Building, Delegation, Coaching, Mentoring, Talent Acquisition
 - Ergonomics & Occupational Safety and Health

Tools & Techniques

- Collaborate with International Institute/Industry/Experts to gain expertise and technical know-how on the textile value chain like Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Benchmarking, Key Performance Indicators (KPIs)
 - Machine Idle Time /Capacity utilization
 - Labor utilization like Night Shift/Second Shift with safety measures
- Quality Certification
- Automation : ERP Softwares, Eton, SwitchTrack, Robotics and Pneumatics, etc.
- KM, Quality Circles, BPR, Time – Motion Study, Lean Manufacture Cluster Scheme (LMCS) by MSME/NPC

KPIs

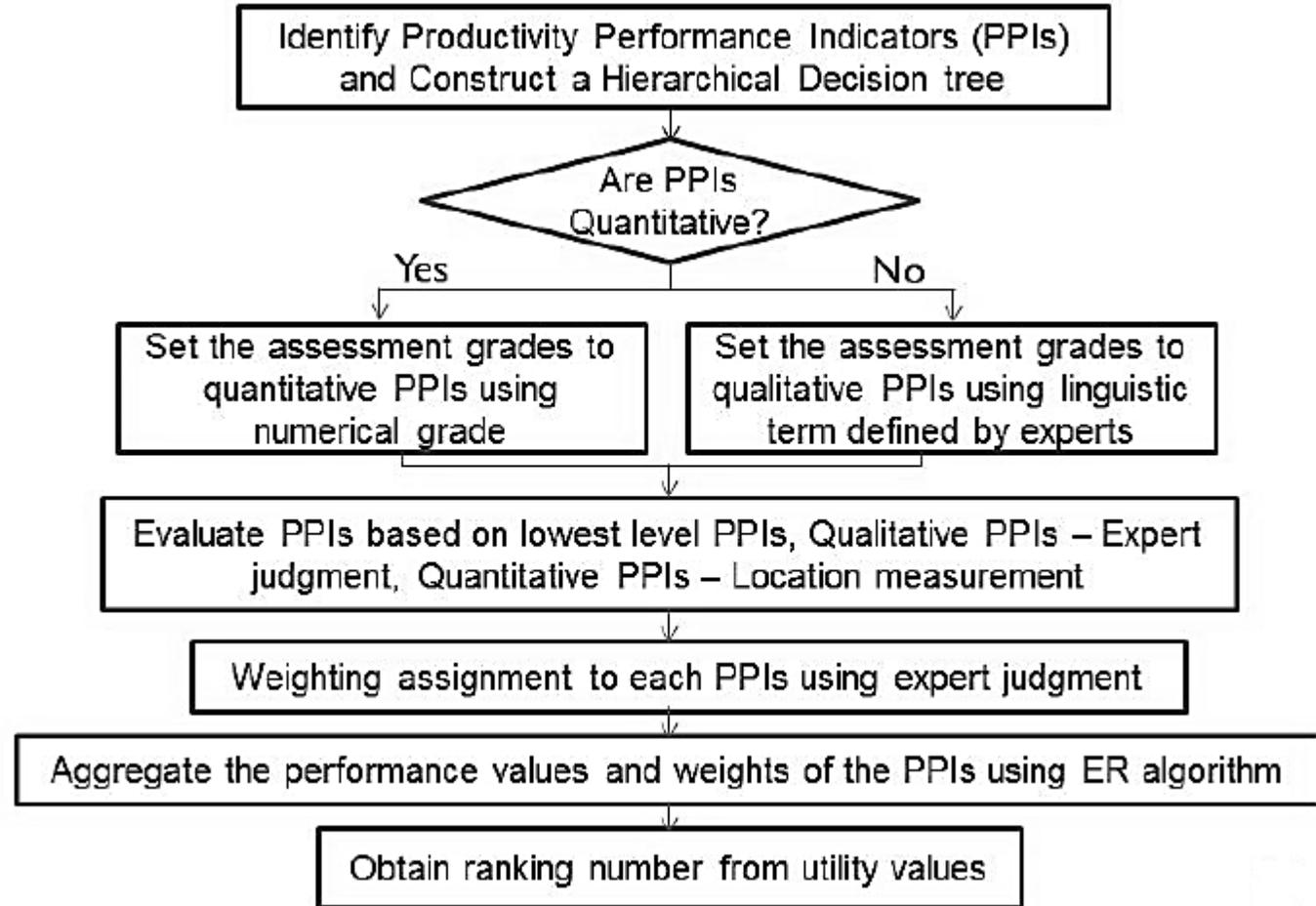
- **1. Factory Level KPIs**
 - 1.1 Line Efficiency / Factory Efficiency
 - 1.2 Man to Machine Ratio
 - 1.3 Cut to Ship Ratio
 - 1.4 Order to Ship Ratio
 - 1.5 On Time Delivery rate
 - 1.6 Right First Time Quality (RFT)
 - 1.7 Quality Performance
 - 1.8 Lost Time Percentage
 - 1.9 Worker absenteeism rate
 - 1.10 Employee Turnover Rate
- **2. KPIs for Cutting Department**
 - 2.1 Marker Efficiency
 - 2.2 Fabric Utilization
 - 2.3 Labour Cost per piece
- **3. KPIs for Sewing Department**
 - 3.1 Line Efficiency
 - 3.2 Lost Time Percentage
 - 3.3 Defects per Hundred Units (DHU)
 - 3.4 Percentage Defective Level
 - 3.5 Man to Machine Ratio
 - 3.6 Labour Productivity
 - 3.7 Style Changeover Time
 - 3.8 Labour Cost per Minute
- **4. KPIs for Finishing Department**
 - 4.1 Right First Time Quality
 - 4.2 DHU and Defective Percentage Level
 - 4.3 Garment rejection rate
 - 4.4 Labour Cost per minute

KPIs

- **5. KPIs for Merchandising Department**
 - 5.1 On Time Sample Submission rate
 - 5.2 On Time Shipment Delivery rate
 - 5.3 Sample Hit Rate
 - 5.4 Sample Rejection rate
 - 5.5 On Time Enquiry Response Rate
 - 5.6 On Time Production File Handover Rate

- **6. KPIs for Quality Control Department**
 - 6.1 Right First Time Quality
 - 6.2 Defects per Hundred Units (DHU)
 - 6.3 Percentage Defective Level
 - 6.4 Shipment Failure rate
- **7. KPIs for Industrial Engineering Department**
 - 7.1 Labour Productivity
 - 7.2 Machine Utilization
 - 7.3 Lost Time Percentage
 - 7.4 Individual Operator Efficiency
 - 7.5 Actual Cost Vs Target Cost

BENCHMARKING



BENCHMARKING – Indicative List

- **Cost Structure:** Raw material costs, labour costs (including wages), Energy costs, Interest charges, distribution expenses (including transportation & logistics etc.)
- **Labor Productivity** – skill, laws, technology, gender,
- **Process Time** - overall time a firm uses for production and reach to the target market
- **Work Environment** – working hours, laws, etc.
- **Capacity Utilization**
- **System Improvement** - Development/Up gradation in product line or production technology, Investment in research & development and investment in training & development of employees.
- **Business Leadership:** Proficiency of top managers (measured by educational capabilities) and Experience of the top management.

MSME-LMCS by NPC

- OBJECTIVE
 - Reducing waste; Increasing productivity; Introducing innovative practices for improving overall competitiveness; Inculcating good management systems; and Imbibing a culture of continuous improvement
- BENEFITS TO MANUFACTURERS
 - economy of scale that reduce per unit production cost and
 - increased productivity of the enterprises
 - enhanced competitiveness in domestic and overseas markets.
- LEAN TECHNIQUES
 - 5S System, Visual Control, SOP, JIT, KANBAN, Value Stream Mapping, Kaizen, Poka Yoka, Cellular Layout, TPM, etc.
- IMPLEMENTATION OF LMCS
 - Tier I: LM Consultant (LMC) is assigned to Mini Cluster (MC)
 - Tier II: NMIU facilitates, implements and monitor
 - Tier III: SSC provides overall direction

CASE STUDY

- **SPV** : Noida Apparel Lean Manufacturing Society'- 9 units cluster into manufacturing /exporting of Ladies and Kids garments
- **Lean Tools Used:** VSM, 5S & Visual Management, Pareto Analysis, Fishbone diagram, Brainstorming
- **Identified Problems :**
 - Non-availability of technical skills
 - High throughput time
 - High WIP
 - High absenteeism & labor turnover
 - Lack of Innovation and technology up gradation
- **Overall Benefits**
 - Cut to ship ratio improved
 - Cycle Time Reduction
 - Sewing time improved, production increased
 - Approximate savings of ` 7.17 Lakhs

Negotiation

- Joint Ventures/Partnership/MoU with buyers on trend forecasting, demand planning, logistics management, product design, innovative and functional fabrics, etc.
- Infrastructure/Cluster Development /Re-structure Policy
- Grading System of workers based on their skills
- Labor Reforms like Wage Rates, Leave Rules, Contract Terms and Conditions, Notice Period
- Work Efficiency Reward Policy cum Training Cost Recovery Policy – It should be based on throughput.
- Training Course design, standardization and circulation
- Establish Centre of Excellence at National Level
- Recognize Productivity Champions
- Taxes, Levies, Incentives, etc.

Pillars of Success

Demand/
Trend

Negotiations

Productivity
Tools

Training





Thank you

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