Lean Manufacturing Competitiveness Scheme (LMCS) in India: An Experience

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The Scheme

Objectives Of The Scheme

- Increase Productivity;
- Improved quality, cost and delivery time of product & services;
- Outstanding customer service;
- Movement towards zero waste;
- Increased profits and growth to business; and
- Building a culture of continual improvement.

Implementation Structure

- The scheme will be implemented in clusters all over country
- Initially, in the Pilot phase , it will be implemented in 100 clusters.
- Based on the success achieved, it would be extended to more clusters in the future
- A three tier structure proposed for implementation

Implementation Structure

Mini Cluster (MC) : As SPV

- Will be formed at lowest level
- 8-12 units would incorporate a SPV.
- SPV will engage Lean Manufacturing Consultant (LMC)

Mini Cluster: As DPG

- Will be formed at lowest level
- 8-12 units would incorporate as a DPG Under the Umbrella of Existing Association
- DPG will engage Lean Manufacturing Consultant (LMC)

Contd...

National Monitoring and Implementation Unit (NMIU)

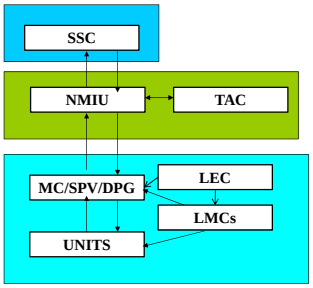
- Next higher level tier of Mini Cluster
- Responsible for facilitiating implementation & monitoring
- **National Productivity Council (NPC)** will function as NIMU

Contd…

Screening and Steering Committee (SSC)

- Formed at the highest level
- Will provide overall direction to the scheme
- Will be headed by **Development Commissioner (MSME)**

Three Tier Structure



Coverage & Eligibility

- Open to all units, who qualifies as Micro, Small or Medium as per act.
- Units are required to form a MC of 10 or so by signing MoU among themselves
- **Formalize their association by forming SPV, form may be:**
  - ✓ "Trust" as Indian Trust Act, 1882
  - ✓ Private Limited Company
  - ✓ "Society " under The Societies Registration Act, 186

  or Formalize DPG by taking a resolution by the Association

Financial Assistance

A maximum of 80% of the project cost for each cluster will be borne by the Government. The assistance would be limited to the first year, of the Scheme.

Five Stages

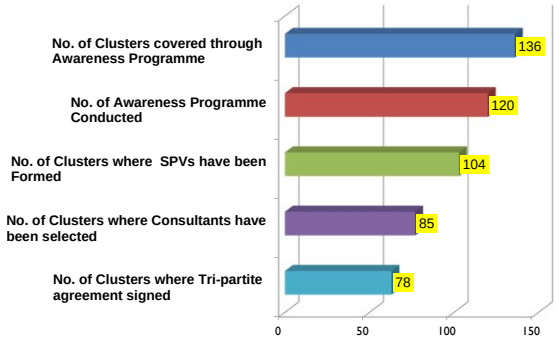
- DSR • Diagnostic Study Report
- MBR2 • Milestone Base Report-2
- MBR3 • Milestone Base Report-3
- MBR4 • Milestone Base Report-4
- MBR5 • Milestone Base Report-5

An analysis of the status of the LMCS in India

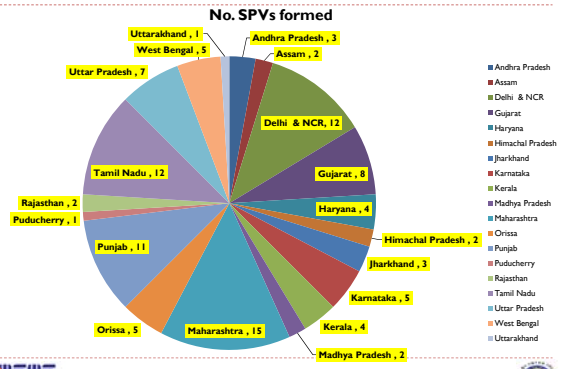
Overall status of the scheme till date

Activities	Nos
Awareness Programme Conducted	120
Clusters covered through Awareness Programme	136
Clusters where SPVs have been formed	104*
Clusters where Consultants have been selected	85
Clusters where Tri-partite agreement signed	78

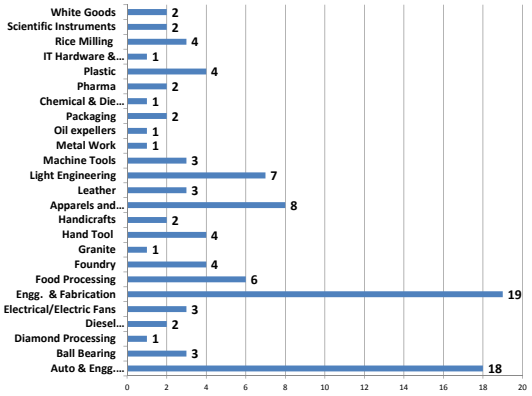
Overall status of the scheme till date



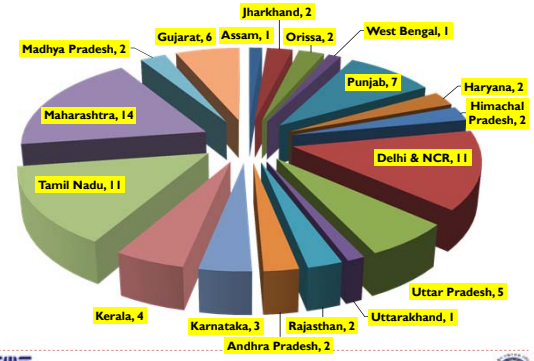
SPV Formed- State wise(104 Nos.)



Distibution of SPVs/DPGs formed- Sector Wise



LMC appointed- State wise(78 Nos.)



Benefit realisation across units during implementation of Lean.

Improvement achieved in various clusters after implementation of Lean are as follows:

1.Awareness of waste minimization and 5S concept.
2.Reduction in inventory.
3.Reduction in defect rate.
4.Reduction in rejections and Die Change time.
5.Improvement in productivity.
6.Reduction in Lead time.
7.Use of visual control system
8.Computation of cycle time / Takt time helped units to identify bottlenecks.
9.OEE implemented for critical machines and action plans formulated for the purpose of productivity improvement.
10.Training on good maintenance practices given and system of daily and periodic maintenance activities implemented.

Benefit realisation Contd...

11. Brainstorming with the workers has helped in elimination of rework.
12. Process streamlining has helped the unit in savings. Resulted in reduced manual handling resulting in improved productivity.
13. Earlier most companies didn't have any data collection system now each company captures minimum of ten data.
14. Labour productivity improved.
15. Unit owners are now able to understand the importance of SYSTEMS, data collections as well as the losses that they were facing.
16. Identification of unneeded items were sorted, and disposed off. This resulted in space clearance, realization from disposal of waste material.
17. Lay out improvement in the unit where distance travelled in the processing of the products got reduced.

Problems face during Lean Implementation

1. SMEs have typical constraints viz. shortage of skilled manpower, financial constraints, lack of marketing set up, heavy dependence on CEO for each and every activity in the company etc.
2. The basic systems do not exist in most of the units and most of the workers never receive trainings.
3. Employees are not spared by CEOs for training.
4. The production managers of MSME units are not concerned about anything other than Production. They find Lean initiatives as working against their production deadlines and hence cold shoulder the efforts.
5. Most of the lean initiatives are allowed to implement only after the production hours in late evening.
6. Even after showing tremendous monetary gains it becomes difficult to maintain the continuity in absence of support and participation from the top management.

Thank You

Phase wise key factors of implementation cycle of the LMCS in clusters :

The key phases of implementation cycle of LMCS are as follows:

Phase -1: Launching the initiative

- Demonstration of commitment by unit owners
- Effective resource management

Phase 2: Managing the Lean implementation effort

- Top Management Commitment
- Good and fair data collection systems
- Driving out fear
- Education and training
- Good communication plan
- Handling people and policies
- Shortage of Lean Consultant
- Reward and recognition linked to success of the project

Phase wise key factors of implementation cycle of the LMCS in clusters .....contd

Phase 3: Sustaining the implementation effort

- Commitment at all level
- Institutionalisation of the processes
- A good training and learning system
- Project selection system
- Sharing of best practices and success stories through various interventions
- Inter-departmental service level agreement at the end of each project
- Review system for LMCS plan
- Bottom line savings are to be part of balance sheet
- Financial and process audit system
- Involvement of all stake holders
- Well defined organisation structure
- Reward and recognition system