**HIGHLIGHT OF LEAN MANUFACTURING SCHEME**

**(Ministry of MSME**)

The Development Commissioner, Ministry of Micro, Small & Medium Enterprises (DCMSME), Govt. of India, will implement up-scaled “Lean Manufacturing Competitiveness Scheme (LMCS)‟, for the benefit of Micro, Small & Medium Enterprises (MSMEs) during the 12th Five year plan, after successful completion of the Pilot Phase. The scheme will be implemented in 500 mini clusters during 12th Five Year Plan with the total Project Cost of Rs. 240.94 crores.

The implementation of lean manufacturing technologies in the enterprises will lead to increasing return to scale, i.e. (i) economy of scale that reduce per unit production cost and (ii) increased productivity of the enterprises (iii) enhanced competitiveness in domestic and overseas markets. Simultaneously it also leads to increased expertise in the firm in respect of better work culture, managerial competencies, etc.

While some organizations in the country have initiated lean manufacturing practices and have started to reap the benefits, these practices have not reached many MSMEs in the country. The concept and techniques of lean manufacturing is still novel to most of the micro and small enterprises in the country.

Manufacturing has been recognized as the main engine for growth of the economy. The share of manufacturing sector in Indian National GDP over the years has stagnated to 14-15% only. The National Manufacturing Policy of Government of India envisages share of manufacturing to reach target of 25% of the National GDP by 2022. To achieve a sustained rate of growth, the manufacturing sector needs to build and maintain competitiveness needed to face the challenges posed by globalization.

**SCHEME CONCEPT**

Need for Lean Manufacturing: Ever changing globalized environment has been posing challenges of competitiveness and survival to all the constituents of the economy. It has been more so for MSMEs in the manufacturing sector. It has been noticed that units are so engaged in their day-today management issues that they don’t have time and resources to dedicate for a strategic understanding of the need and acquiring means of various techniques which would help them in enhancing their productivity and hence being competitive in the world markets. Lean Manufacturing is a set of techniques, which have evolved over a long period and are based on various minor to major breakthroughs that help in reducing cost and hence increase productivity and competitiveness. A list of main LM techniques is given below:

a) 5S System g) Visual Control:

b) Standard Operating Procedures (SOP) h) Just in Time (JIT)

c) Kaizen Blitz or Rapid Improvement Process i) Cellular Layout

d) Value Stream Mapping j) Poka Yoke or Mistake Proofing

e) TPM (Total Productive Maintenance) k) Kanban System

f) Single Minutes Exchange of Dies/ Quick Changeover

**OBJECTIVES OF LEAN MANUFACTURING SCHEME**

The objective of the Scheme is to enhance the manufacturing competitiveness of MSMEs through the application of various Lean Manufacturing (LM) techniques by;

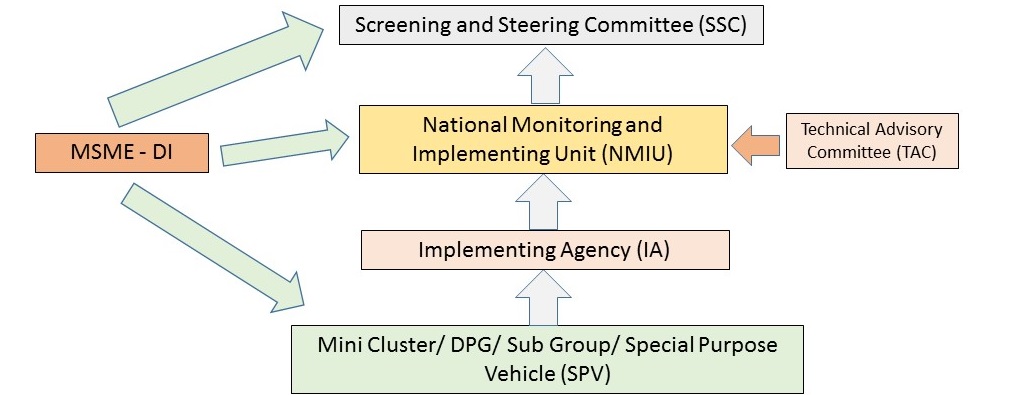
1. Reducing waste
2. Increasing productivity
3. Introducing innovative practices for improving overall competitiveness;
4. Inculcating good management systems;
5. Imbibing a culture of continuous improvement.

The general approach involves engagement of Lean Manufacturing Consultants (LMC) to work with selected MSMEs in the chosen clusters with financial support by the Government. Under the Scheme, MSMEs will be assisted in reducing their manufacturing costs through proper personnel management, better space utilization, scientific inventory management, improved process flows, reduced engineering time and so on with the application of LM techniques. The Scheme is basically a business initiative to reduce “waste” in manufacturing.

The interventions lead to increase in competitiveness of the individual units i.e. They can manufacture better quality products with less cost by improvement in process flow, standardization of process, reduction in waste, processing time, etc. The extent of tangible benefits depends upon the scope of improvement, benchmarking, involvement of the entrepreneurs/units. All these aspects are studied and included in the Diagnostic Study Report which is prepared by the LM Consultant at the start of the interventions at the field level. Incremental improvements are verified by the NMIU and DC, MSME office.

**Implementation arrangement**

A three tier arrangement has been proposed in the Scheme. A Mini Cluster (MC) would be formed at the lowest tier. The units of MC would work with assigned Lean Manufacturing Consultant to implement the specific Lean Manufacturing techniques. The next higher level tier, National Monitoring and Implementing Units (NMIUs) will be responsible for facilitating, implementation and monitoring of the scheme. At the highest level, Screening and Steering Committee will provide overall direction to the scheme and will be headed by the Development Commissioner (MSME).



The Scheme will be implemented by National Monitoring and Implementing Units (NMIUs), under the overall directions of DC-MSME (QCI has been appointed as NMIU) appointed by DC-MSME). The units are required to form a MC ideally of 10 units (minimum 6) by signing among themselves a Memorandum of Understanding (MoU) to participate in the Scheme. Fees of lean Consultant is subsidised in the scheme by way of 80% of Lean Consultant is being borne by Government of India while 20% cost of lean consultants fee needs to be borne by cluster members. The implementation will be completed in 18 months.

**SCHEME HIGHLIGHTS LIGHTS**

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| Particular | Scheme Requirement |
| Implementation Period | 18 months |
| LM Consultant Fees | Rs. 36 Lakhs (Max.) |
| MSME –DI | Iinvolved in Audit, Awareness program, formation of Cluster etc. |
| Payment Terms | Pro Rata. Cluster size limited to 6 units |
| Contribution from Industries | Flat 20% |
| SPV formation | Sub Groups/ Distinct Product/ Project |