



Global Manufacturing Productivity Improvement by Enhancing Cluster Ecosystems (GMPIECE)

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The GMPIECE initiative is a global programme addressing manufacturing productivity, specifically with a context of cluster development.

A cluster can be described as a concentration of enterprises and/or owner operated producers that are co-located to take advantage of:

- Shared resources or support services
- Shared experiences and peer support
- Access to specialist skills, competencies or technologies
- Access to supportive logistics components
- Access to particular markets

Generally, firms that operate within clusters are more innovative and collaborative.

A cluster usually includes a number of small and medium enterprises (SMEs) and even startups. It may also involve large enterprises and take advantage of the colocation of institutions from the public sector – national, regional and/or local agencies. Over time, companies within the cluster may redesign the value chain of their sector and adopt vertical integration to build larger, self-sustaining organisations.

The obvious example of a large cluster is Silicon Valley in the USA – and similar ‘tech hubs’ elsewhere.

Clusters normally arise from specific policy (and support) initiatives but should become self-sustaining. One factor of policy implementation is to overcome the risk-averse tendencies of some SMEs and many large enterprises who want their product/service to operate in a ‘perfect market’ and may prefer to remain in their established ecosystem rather than risk a move to the new cluster-supporting environment.

A cluster should facilitate connectedness, within a ‘safe’ environment which allows relationships to be established and transparency to be built. It does this by bringing together SMEs and larger enterprises which contribute to a common value chain and have a common interest in building growth. This can be facilitated by regional or local government agencies seeking to improve economic development, and willing to provide funding for infrastructure elements or provide development grants/loans.

The GMPIECE initiative seeks to work with appropriate, established and emerging clusters to improve their productivity and the competitiveness of cluster participants. For interventions in the value chain to be successful, clusters/participants must be willing to re-engineer their activities to improve cooperation and collaboration.

The GMPIECE approach seeks to transcend the traditional cluster-related technical assistance model, by offering relevant but generic productivity improvement expertise. This means that



cluster participants with different processes/activities can be dealt with and supported within a single project initiative.

Unfortunately, cluster 'success' is often poorly defined. The longer term goals of increased productivity and competitiveness are not simple to measure – but being difficult is not synonymous with impossible. Also, some agencies may be looking for secondary benefits such as increased employment. What matters is being sure of the aims of any project or initiative to create or develop clusters – a longer-term vision and a definition of success factors should be an integral part of the project planning process.

Within this overall context, the GMPIECE initiative has identified 3 key factors/areas with a potential to support cluster development/enhancement. These factors (with an indication of sub-factor or specific areas that might be addressed are:

1. Compliance: supporting cluster participants in meeting strict international standards and regulations via 'no compromise' and 'prevention is better than detection' approaches to quality management;
2. Productivity: infrastructure development that creates the potential for high productivity (transport, telecommunications, logistics, skills infrastructure) and firm-based developments that can exploit that potential (technology development, value stream enhancements, workforce development)
3. Value Addition/Market development: helping participants move up the value chain to address new markets (branding, technology development and product development)

The broad framework for a specific project within the overall GMPIECE initiative is:

- Confirmation of an appropriate and substantial cluster presence with appropriate policy support
- Establishment of a GMPIECE cluster advisory board – to include representatives of all key stakeholders
- Confirmation of long-term vision/success measures
- Establishment of baseline performance measures
- Identification (or selection) of cluster participants with a high potential to benefit from cluster support interventions
- Development of intervention projects at cluster/infrastructure/ecosystem and participant/process level (including the costing of such interventions and a cost-benefit analysis, incorporating social, economic, and environmental benefits in line with the longer-term vision for the cluster)
- Identification of GMPIECE 'experts' capable of supporting each project
- Prioritisation of identified projects
- Identification of sources of funds for the prioritised projects
- Detailed project planning for each funded intervention
- Project Execution
- Post-project evaluation of shorter-term benefits
- Review
- Dissemination of a project report



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Further reading:

http://backonline.apswiss.ch/6001/cluster_approach_print.pdf

<http://www.clustersfordevelopment.org/>