

Entrepreneurs and Industrial Clusters with Reference To Indian Context**Gururaj G Phatak**

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Abstract: Industrial Clusters have become the focus of the public debate, economic policy and academic research. Clusters can be defined as sectoral and geographical concentration of enterprises, in particular Small and Medium Enterprises (SME), faced with common opportunities and threats which can: a) give rise to external economies (e.g. specialized suppliers of raw materials, components and machinery; sector specific skills etc.); b) favor the emergence of specialized technical, administrative and financial services; c) create a conducive ground for the development of inter firm cooperation and specialization as well as of cooperation among public and private local institutions to promote local production, innovation and collective learning. This Paper brings out the Concept of Industrial Clusters. Its role in Economic Development. Characteristics of Industrial Clusters, the relationship between Entrepreneurship and Industrial Clusters, Problems faced by Industrial Clusters.

Keywords: Industrial Clusters, Entrepreneurship, Small Medium Enterprises.**Introduction:**

Historically Indian economy is comprises two sectors rural and urban. The rural India plays a very important role in deciding economic development as 70 percent of Indian population lives in rural areas. The major source of earnings of rural population comes from agricultural. Other than agriculture, rural economy also depends on non-agricultural sub-sector consist of several economic activities such as cottage and village industries, khadi, handloom, handicrafts, trading of general goods, small shops, petty traders and service such as – transportation, communication, banking.

Many recent research studies have shown that the population dependency and engagement in agricultural sector in India has been decreasing since last few years. It is evident from the fact that the agricultural contribution has come down to only 18 percent of country's GDP. The non-availability of cultivable land (huge pressure of increasing population, joint family's land division system etc.), low irrigation facilities, lack of technological up-gradation in production, miss management of land, recurring flood, etc have forcefully shifted rural people from agriculture to the non-agricultural activities. The small business plays a vital role in country's economy. It is estimated that SME (small and medium enterprises) sectors contributes 40 percent of industrial production, 35 percent of manufacturing exports and employment about 24 million people in over 13 million units. The numbers of employment in each unit has increased from 4.48 (2001-02) to 6.24 (2006-07) per unit. These industries are particularly food processing, chemical and pharmaceutical, sports goods, leather goods, plastic products, Handloom and Handicrafts etc.

Concept of Industrial Cluster:

The industrial cluster is not a new economic phenomenon. It was evolved a far long back, but its actual implementation started in the end of this nineteenth century when globalization and liberalization took place in many developing countries. Presently, every developed and developing nation is taking cluster as a strategy for regional economic development. The ideas of cluster implementation for economic development vary between country to country and region to region. The more developed country like Italy, Japan etc. as they are more advance in technology, so their ideas for cluster approach is to go for international market penetration and enhancement of competitiveness etc. But the developing country likes India cluster approach is for – rural economic development, community development (through upliftment of traditional skills and knowledge etc), pro-poor growth, market development etc. According to a report (MSME foundation 2007), India have around 1157 Industrial clusters.

DEFINITION OF AN INDUSTRIAL CLUSTER

There is a variety of different concepts and definitions of industrial cluster in the literature having roots in business economics, innovation studies and development economics.

For example,

Porter (1990) defined a cluster as a geographic concentration of interconnected companies and institutions in a particular field.

Rosenfeld (1995) defined a cluster as a loose, geographically bounded agglomeration of similar, related firms. Similarly,

Swann and Prevezer (1996) defined an industrial cluster as a group of firms within one industry based in one geographic area.

Schmitz and Nadvi (1999) defined a cluster as a sectoral and spatial concentration of firms. Brenner (2004) also defined a local industrial cluster as an industrial agglomeration that is caused by local self-augmenting processes.

Morosini (2004) defined an industrial cluster as a socioeconomic entity characterized by a social community of people and economic agents localized in close proximity in a specific geographic region.

Sonobe and Otsuka (2006) defined an industrial cluster as a geographical concentration or localization of enterprises producing similar or closely related goods in a small area.

There are few points worth noting in the above definitions of an industrial cluster.

First, is the importance of the spatial proximity and geographic scope of the cluster which greatly facilitates the flow of crucial business related information central to the capability to innovate.

Second, a cluster is a dynamic phenomenon. It is not only the localized concentration of linked industries but the particular process that leads to the development of the interaction and functional relationships between firms. Last, social infrastructure such as trust and a shared vision is important.

Definition of Clusters

A cluster is defined as a concentration of enterprises producing same or similar products or strategic services and is situated within a contiguous geographical area spanning over a few villages, a town or a city and its surrounding areas in a district and face common opportunities and threats. Clusters may be broadly divided into the following broad categories:

Industrial cluster: Having at least 100 enterprises and/or a minimum turnover of Rs.100 million. Units in these clusters are functioning from factory premises with hired workers. Such clusters have a mix of micro, small, medium, few large and at times all micro units.

Micro-enterprise clusters: Such clusters are all micro units and are mostly done by household based units by mostly utilizing home based workers. These include artisanal (handicrafts and handloom) and other micro enterprise clusters. A handloom cluster has a minimum of about 500 looms and that of handicrafts and other microenterprise clusters is estimated to have around 50 units.

Role of Industrial Clusters in Economic Development:

- Cluster creates a healthy co-relation between the central with state government, local institution/ organization (NGO's, SHGs, clubs, societies etc.), international organization (UNIDO, UNDP etc) and other educational institutions etc.
- The labour pooling nature of small industrial cluster can minimize the problem of unemployment for a less developed region.
- The establishment of clusters in a particular region or area induces to set up other important business near by it.
- Cluster attracts the suppliers, customers and public investors in infrastructure by providing high quality products and services, which benefits all area business.
- The clustered firms through their co-operative work get the benefits of innovation in their products and production, services and management etc.
- The demand for labor raises and thereby the wage level of the labours than their earlier level. In cluster, the agglomeration benefit raises the efficiency of the small firms and makes it possible to access the markets through a division of labour.
- The cluster provides the small individual firms to specialize in specific tasks, access special skills and services and inputs. The agglomeration of small firms can lower the costs in accessing inputs, labour and information.
- The knowledge spillover in cluster make feasible to small firms to acquire new know-how, new products and new production techniques that could not be obtained through markets.
- Local co-operation, both individual firms and cluster institution can strengthen the ability of clustered actors to compete in markets, by sharing costs by engaging in joint tasks such shared marketing and distribution.
- The rapid flow of capital, goods, people and ideas across boards, can help bring local actors in to global markets and enhance their income earnings opportunities.

Characteristics of Industrial Clusters:

Industry clusters include groupings of firms with diverse characteristics, and as a result, varied potentials for employment growth and local economic development. For example, a cluster may consist only of firms engaged in the production of similar products (e.g., apparel, upholstered furniture, or automobile parts). Clusters also may be composed of vertically integrated firms (e.g.,

sawmills, millwork, cabinet manufacturers) or firms linked by their reliance on specialized services or labor markets. Interaction among cluster members ranges from limited purchase - sale relationships to extensive inter-firm collaboration, and state and local support for cluster firms ranges from passive to proactive.

By and large, characteristics of clusters have significant influence on how clusters are developed and governed. In the analysis of 'cluster characteristics', studies concentrates on two elements, i.e. the nature of the industry and the structure of the cluster. The nature of the industry shapes the specific context that influences cluster structure and the behaviors/ relationships of firms and other parties involved in the cluster.

Basically, clusters apply a specific institutional support to generate specialized services in response to particular problems. 'Public provision' in which generic or specific services, such as marketing services, vocational training and technology services, are provided to clusters by public agencies. In the second modality, called 'public-private partnerships', government fully invests in or co-finances with the private sector to establish specific service mechanisms, but lets the private sector execute them. The third modality, 'intermediary forms of non-profit enterprise promotion agencies' is a mechanism to deliver specific services for enterprise development. In the fourth, 'business associations' provide specialized services for clusters. In the fifth, a small number of firms cooperatively form 'consortium' with formal agreements to pool efforts or resources to achieve collective purposes. The sixth type is 'the formation of groups of firms', which is restricted to a smaller group of firms and often involves a more flexible or informal arrangement to cooperate on common issues (e.g. joint tendering for export or production orders and joint procurement of inputs).

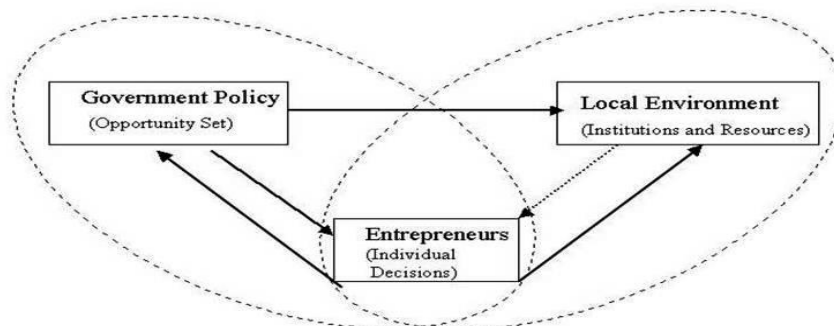
Entrepreneurship and Industrial Clusters

Entrepreneurs play a special role in cluster formation. Entrepreneurs start firms that capitalize on technological opportunities, adapting scientific breakthroughs and generic technologies to create

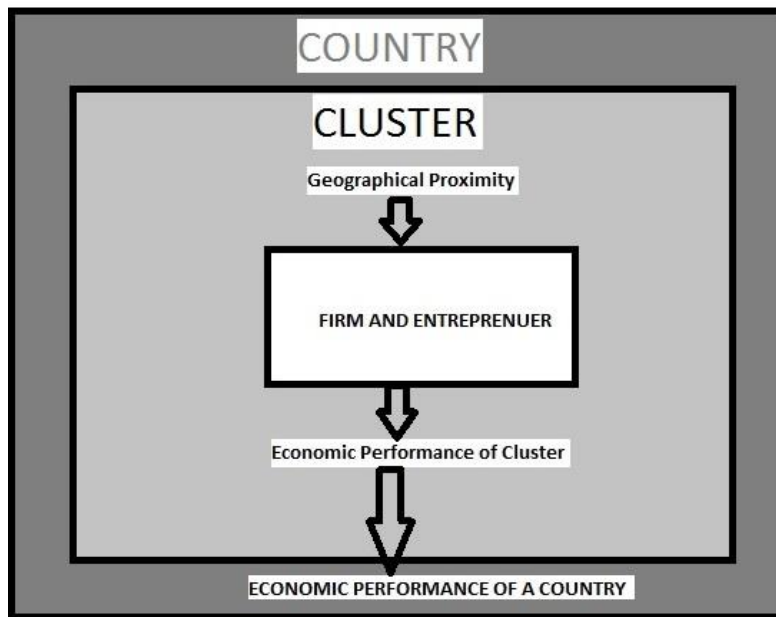
new product markets and reorganize economic activity. Through their individual decisions in creating and developing new companies, entrepreneurs may collectively also spark regional industrial transformation. Cluster formation is a complex and self-organizing process that occurs in developmental stages. Agglomeration economies emerge over time from the activities of individual entrepreneurs and the institutions that coevolve to support them. The attributes observed in a mature and fully functioning cluster are artifacts of the formation process and reflect attributes and relationships formed as the cluster developed, rather than preconditions for cluster development. Understanding the process of cluster formation may be expedited by considering the motives and constraints of entrepreneurs as they form and grow their innovative small firms.

Entrepreneurs starts there ventures based on their prior experience and interest, exploiting new opportunity. Entrepreneurs earn their living by recognizing and acting on business opportunities. In small firms, the entrepreneur, who serves as both the owner and the manager, has the responsibility to act on business opportunities which can lead to major strategic changes in the business. Entrepreneurs appear to be a critical element in the formation and the vibrancy of clusters of technology-intensive firms. Entrepreneurship is a local event; individuals start companies in the location where they have formed business networks and have access to resources. The local environment, in terms of the types and quality of resources, the networks and institutions that provide support and further business interests, ultimately affect the sustainability of the start-ups. In sum, an industrial cluster is an agglomerate of mutually reinforcing firms and aligned interests.

Figure 1 presents a schematic incorporating these ideas and depicting the interdependent nature of the relationships among entrepreneurship, government policy and environmental resources and geographic factors. In the diagram, both the local environment, this includes social and business institutions and physical and human capital resources, and government policy influence entrepreneurial decisions.



The Figure 2 Shows the Analytical Perspective of Firms and Clusters in Economy



Problems Involved With Industrial Clusters:

1. Poor Infrastructure:

India's SMEs clusters gone through a long period of development although, its full potential level not explored yet. There could be various issues that can be helpful to understand sickness in SMEs cluster. Poor Infrastructure has been a big cause of sickness. A concrete infrastructure i.e. Power, road, transport, energy, water, ports and airports are key point of development. Regular interruptions in the power supply often damage the SMEs machinery. Almost all States of India facing daily power cuts of from one or two hours and so on. State Electricity Boards, which are the authorities to regulate supply of power, pay little attention to the power requirements and associated problems of the SME units. The condition of the state electricity boards is also not satisfactory. Also, local system of transportation affects business of cluster intensively. As seen in many areas, poor local road condition doesn't make good impression to new investor and its lead to break down in business activity as well.

2. No Support from Government Agencies:

To meet the various infrastructure requirements of the SMEs, the Government has established State Industrial and Infrastructure Development Corporations and Small Industries Development Corporations. These state level organizations are providing the infrastructure requirements in their respective states. However, the penetration of these organizations seems to be not adequate in terms of all areas coverage.

3. Raw Materials:

The problem of regular supply of raw materials with required quality at reasonable prices is important for SMEs clusters firms. Moreover, tariffs and duty imposed on high quality imported inputs and big time lag in import process place the Indian SMEs in a less competitive position. In Ninth five years plan of central government of India, documented that, the small sector tends to get more or less a 'residuary' treatment in raw material distribution. The problem of raw material availability has been among the important factors responsible for under-utilization of the capacities in the small industries sector. In recent times the prices of various inputs like steel, coking coal, oil are on increase and unless price stabilization mechanism is conceived, the small units may not be able to cope with the volatile prices of critical inputs. In order to overcome the difficulties with respect to availability of various raw materials, earlier the Industrial Policy Statement had envisaged introduction of a scheme for building up of a buffer stock of essential and scarce raw materials. For above role of state and central level government agencies are quite important.

4. Employment laws:

As per existing government of India laws the units employing less than one hundred persons cannot be taken under the employment laws, but in reality, when these units try to change their employee size, they are not able to do it as the employees go in for strike or challenge for judicial process where dates of hearing are fixed months after filing the application due to slow judicial process in India.

5. Lack of Innovation and adoption of New Technologies:

Adoption of new technologies is not frequent in Indian SME units. Still several efforts have been going on, for example, in the state of Gujarat, Dr. Anil Gupta's Honey Bee Network and Indian Institute Management, Ahmadabad, have discovered local technology innovators from grassroots levels and have provided them a suitable framework. It is seen as laudable achievement in supporting SME units' innovations and technological adoption.

6. High cost of production:

Old fashionable technology for production, manufacturing of poor quality products at high cost, and competition with one another have always has been big trouble for SME sectors. It loses ground when faced with better quality products and lower prices of big industries. In most of India's SME's sectors cluster facing same problem and going to be on verge on extinct. As given example at last of this chapter of UNIDO intervention in Jaipur Cluster. This start up of transformation process is very needful to get rid of this problem.

7. Inefficient Loan Recovery Mechanism:

It's still lacking an appropriate mechanism to recover loans. "SFCs & Debt Recovery Tribunal have the right under the Provision of Arrears of Land Revenue to sell the closed units to recover the amount of loan yet the recovered amount is not anywhere near the credited amount"

8. Poor quality of human resources:

Most of SMEs clusters have been fail to meet the required quality complete human resources. Their traditional way and non train worker do not assembly way of production so they fail to compete in market. The responsibility of skill up-gradation and providing training to the labor force in small sector is vested with a network of institutions like Small Industries Development Organization (SIDO), Small Industries Service Institutes (SISIs), Technical Consultancy Organizations (TCOs), Process & Product Development Centers (PPDCs), District Industries Centers (DICs), Regional Testing Centers (RTCs), Central Footwear Training Institutes (CFTIs) and Tool Rooms (RBI, 2005).

9. Industrial Unrest:

It's a quite common problem faced by employers of SMEs clusters. Inappropriate wage rate creates industrial unrest. Sometimes it has been seen that skilled workers go to an industry where they find higher wages and this tendency in market

not favors the interest of SMEs. It draws attention towards need for very organized Human Resource Division within cluster that's not possible for many SSIs and in whole cluster.

10. Law and Order Situation:

Anti-social elements are subject of big concern in Indian industrial areas due to not having of tight law and order arrangements.. Sometimes, local authorities express their helplessness and inefficiency, as they are bounded by their limited power and authority. Since, the law and order comes under State Government domain so, central govt. measure take least interest in this issues

11. Marketing Problems:

The marketing problems of small industries clusters in India flow from their scale of operation, and rivalry with products of large scale units. Middlemen system of marketing of their products can be still found there as for example Chanderi Cluster of Saree in Madhya Pradesh, India. They can usual explore their nearest market only. "Small units suffer from the absence of a competitive network of wholesalers and trading companies that could introduce their products into domestic and foreign market, and provide them with pertinent market information" (RBI, 2005).

12. Non progressive form of Taxation:

Rate of taxation should induce SME sectors but sometimes it seems unfavorable to SME and also it varies from one state to another state. As for example just four per cent taxation has been imposed on hosiery industry in the state inducing more sickness in rural areas based SME units. This shows the inverse effect of the rate of taxation at some places.

Conclusion:

In Developing Country like India Recognizing the benefits of clusters as a form of economic organization has influenced governments to implement policies intended to launch initiatives to support existing clusters or to form new ones in regard with: Small and Medium Enterprises (SMEs), Regional Industrial Development; Attracting External Funds and Foreign investors; Research and Innovation at national or local level.

Economic development based on cluster models represent a policy adopted by many economies that can, theoretically, bring multiple benefits in terms of regional development, competitiveness in an industry. Also it can generate an economic environment that will adapt more easily to events such as economic crises or other economic and

social transformation. Although existing cluster analysis highlighted their advantages, the interconnection of factors and their effect on the cluster, the economic theory has not yet provided a model that allows both the analysis and the definition of a process for implementing a

successful cluster. Due to the complexity of the economic relations and environment that define a cluster, it is necessary to continue research from both theoretical and practical perspectives, so that the theoretical model is validated in practice by overlapping it with any existing cluster case.

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