

# **CHAPTER - 1**

## **Introduction**

- 1.1. General introduction
- 1.2. Statement of the Problem
- 1.3. Review of Literature
- 1.4. Gap in Existing Literature
- 1.5. Significance of the study
- 1.6. Objectives of the study
- 1.7. Research questions
- 1.8. Methodology
- 1.9. Chapterisation
- 1.10. Limitations of the Study

# CHAPTER - 1

## 1.1. General Introduction:

Worldwide small scale industry sector is confronting a number of constraints due to small size and isolation, in their journey with large scale sector. Cluster approach helps to minimise these constraints through the benefit of geographical proximity and makes the way of MSMEs easy in the direction of growth and competitiveness. It is needless to mention that industrial cluster has the potential in generating various benefits by stimulating the internal linkages and providing the economies of scale for promoting sustainability and growth of small scale enterprises. In other word cluster approach renders economies of agglomeration and benefit of joint action. Moreover small scale being united on a platform under the umbrella of cluster works together, can virtually counter the challenges, thrown by large scale industries. The present study addresses the role of Cluster Approach on entrepreneurship development in the handicraft sector in the state of Tripura, considering the recognition of cluster approach as the harbinger of entrepreneurship development.

It is found that the journey of industrial cluster has started from the inception of 'Industrial District' Concept of Marshall in developed country but the origin of industrial cluster concept has evolved from the idea of the classical and neo-classical theory of different economists, geographers; namely, Location Theory of Johann Henrich Von Thunen (1826), Marshall's Industrial District Theory, Least Cost Theory of Alfred Weber (1909) and Industrial Cluster Theory of Michael Porter in 1990 has considered as renaissance in shaping the today's industrial cluster theory. However the studies of the classical economists in the period of nineteenth century in regard to the spatial economics and the localization of industries paved the way for the concept of industrial clusters.

There is no unanimously accepted definition of industrial clusters but one will find the variety of concepts and definition of industrial clusters as the theory of agglomeration economies itself is not consistent (Vom Hofe and Chen, 2006).

Cluster is a geographically proximity group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities and defining its boundaries that can range from a single city or state to a country or even a group of neighbouring countries (Porter, 2000). UNIDO defines cluster as the concentration of Micro, small and medium enterprises on a given geographical location, producing same or similar type of products or services and face common threats and similar opportunities.

Industrial cluster has gained the popularity both in countries with developed economies and as well as transitional economies. More than fifty countries across the world adopted the cluster policy as an integral part of the industrial development of those countries. Some of the countries, other than India, in developed economies and transitional economies adopted cluster policy are given below.

<b>Countries in Developed Economies</b>	<b>Countries in Transitional Economies</b>
U.S.A.	Bangladesh
U.K.	Brazil
France	Pakistan
Germany	Sri Lanka
Italy	Thailand
Switzerland	Indonesia
Japan	Peru

There is basic difference between the developed countries and developing countries in the typology of cluster. Most of the clusters in developed economies are found to be innovative clusters but in developing economy there are plenty of low tech clusters. There are some important clusters across the world and their contributions in production and export earnings and generation of employment are well recognized.

<b>Clusters in Developed countries</b>	<b>Clusters other than Developed countries</b>
Film industry in Hollywood in USA	Film industry in Bollywood, India.
Wine industry in California	Information technology in Bangalore, India.
Information technology in Silicon Valley, Boston.	Surgical Instrument in Sialkot, Pakistan.
Ceramic tiles, Leather and footwear industries in Italy	Footwear in Agra, India.
Automobiles and Engineering industries in Germany	Woollen Knitwear in Tirupur, India.
	Footwear in Sinos valley, Brazil

In 1996, 199 industrial clusters of Italy provided 42.5 % of the country's manufacturing employment. In Sweden, local networks in the transport, forest products and metals industries account for over 50 % of total exports. Dalton is home to 174 carpet mills accounting for 85% of USA's carpet output, and almost half of the world's carpet output.( Foundation for MSME Clusters UNIDO CDP Methodology) [http://www.enterprise-development.org/wp\\_content/uploads/Making\\_Clusters\\_Work.pdf](http://www.enterprise-development.org/wp_content/uploads/Making_Clusters_Work.pdf).

The success story of Italian industrial cluster experience has prompted to the policy makers of developing countries to promote the growth of small scale industries by adopting cluster approach in the arena of small scale industries with a view to make them globally competitive in regard to production and export promotion of such industries and India is not an exception one in this regard.

In India the outcome of the industrial policies such as, the industrial policy 1948, the enactment of Industries (Development and Regulation) Act in 1951, Industrial Policy Resolution (IPR), 1956, Industrial Policy Statement of 1977, Industrial Policy Statement of 1991, adopted since the independence could not make possible

way to raise the sustainable development of MSME sector especially, micro enterprise sector and in 1995 the Government of India, constituted an "Expert Committee on Small Enterprises" under the chairmanship of Abid Hussain to review the existing policies in the changing global economic scenario and design new policies for small and medium enterprises (SME) development for facilitating the growth of viable an efficient enterprise that can adjust to technological change and remain internationally competitive.

The committee viewed that “a comprehensive and intensified policy and action programme for promoting clusters should be initiated. This should give special importance to the specific needs of tiny units; the basic elements of such a programme would be technology up gradation, skill enhancement, information dissemination and entrepreneurial competency development”. Though there are century old clusters are in India but cluster as policy recognition was made in India in 1997, by accepting the recommendation of the expert committee headed by Abid Hussain.

A series of cluster development initiatives with a holistic approach across the country under the umbrella of “Small Industries cluster Development Programme” which was renamed as Micro and Small Enterprise-cluster Development Programme (MSE-CDP) after the implementation of (MSMED) Act in 2006 has been completed in India. There are some clusters in the country whose contribution in production and export earnings and generation of employment is well recognized.

<b>Clusters</b>	<b>Contribution</b>
Tirupur garment	Hosiery exports.
Agra footwear	Production & export in footwear
Ludhiana Woollen Knit Wear	Production in Woollen Knit Wear

The clusters in micro, small and medium sector in India contribute 40% of the industrial output and 35% of export. The significant contributors as an industrial

cluster in India in respect of generation of employment, exports are Tirupur for cotton- knitwear, Ludhiana for textile industries, Bangalore for engineering and electronics goods, Agra for footwear etc.

It is also observed that in India most of the clusters in microenterprise sector are handicraft clusters and one will find such cluster in each and every state of the country where the artisans, have been producing a special category of particular craft product, using their inherent skill and expertise. Clusters helps to overcome the finance and technology based constraints of rural artisans and make success in the journey of rural artisans with inherent skills towards the self sufficiency.

The advent of industrial clusters has made a revolutionary change in the growth and development of MSME sector (both organized and unorganized). Presently more than 10.000 clusters are operating in India out of which industrial SMEs clusters and artisan/micro enterprise clusters account for 600 and more than 7000 respectively. There are also about 2,500 untapped rural industry clusters in India. ([www.ibef.org](http://www.ibef.org)).

Indian Handicrafts industry is considered as the second highest employment provider in the country after agriculture. The employment increased to 76.17 lakh in 2010-11 from 65.72 lakh in 2005-06 as per Working Group Report on Handicraft for the 12<sup>th</sup> Five year plan. Out of 74.17 lakh, female alone constitutes 47.4%, SC and ST and constitute 24.7% and 2.3% respectively. The exports of handicrafts (excluding hand knotted carpets) rose from Rs 387.00 crores in 1986-87 to Rs 18639.14 crores in 2014-15.

Despite having economic and social significance, the Handicraft industry, being a component of informal and unorganized sector, has been facing a series of constraint which creates hindrances in achieving its growth at desired level the proof of which is made from 1.2% of its contribution in world market. The constraints associated with this industry are lack of education and empowerment, lack of capital, absence of market intelligence, poor institutional framework, poor exposures of new technology and high state of decentralisation. The constraint, high state of decentralisation has a huge impact on the individual cost of raw material, transportation and other ancillary activities and the cluster approach has

emerged as a remedy to formalise the artisans into a group and getting the benefit of joint action and economies of scale. Considering the economic and social contribution of handicraft sector the Development Commissioner, Handicrafts, Government of India also has taken several initiatives for the growth and development of this industry, one of which is introduction of AHVY Scheme, the introduction of comprehensive cluster approach was the main thrust of this scheme, with a view to organise the cluster participant (i.e. handicraft artisans) under the plat form of SHG which led to empower the artisans and their sustainability. There were 2864 handicraft clusters in India as reported by Working Group Report on Handicraft for the 12<sup>th</sup> Five year plan in 2011.

The Government of Tripura also initiated cluster approach in the handicraft sector to strengthen the state's economy by empowering the artisans who belong to unprivileged segment of the society. Considering the above advent of cluster, in the MSMEs in general and handicraft sector in particular the study stresses upon the role of cluster on entrepreneurship development in this state of Tripura.

## **1.2. Statement of the Problem:**

Since early nineties cluster approach has been recognised as a tool for sustainable growth of MSMEs and Household sector in India as cluster provides the benefit of agglomeration economies to MSMEs which an individual firm cannot gain normally. In India there are more than 6400 clusters. It is also fact that MSMEs in clusters showed a better performance in respect of generation of employment and export earnings. Considering the contribution of clusters in MSMEs, every year new clusters are being set up by Union Government to promote entrepreneurial activities, matching with the competitive global market with a view to enhancing the economic growth of the nation.

There are 305 clusters are in North East India. But With total numbers of 305 clusters, North Eastern Region, in general and Tripura, in particular have not been able to keep pace with the economic and industrial development elsewhere in the country.

Tripura occupies the highest rank in the region in terms of handicraft clusters (with 61 out of 164 handicraft cluster in N E Region). Handicraft sector of Tripura is

mainly based on bamboo and cane product and wide ranges of such products with exquisite designs and artistic appeal found to be the best in the country. It is also observed the demand of state's cane and bamboo handicraft products in national market and the state has a history and tradition of such crafts. The State has vast potential of natural resources such as Bamboo and cane. The state Government has set up the 'Tripura Bamboo Mission' in 2007 for integrated development of bamboo sector. The one of the objectives for setting up of this mission is to promote handicraft clusters by providing continuous flow of supply of raw materials for the development of bamboo handicraft sector.

One will also find a vast potential of human resources i.e.149280 handicraft Artisans in this state. The Government of Tripura also has taken 'cluster approach' as a policy initiative as in the line of the Union government, for providing the logistic support for the growth and development of handicraft sector which in turn will boost the economy of the state. The contribution of handicraft sector in terms of employment generation and export earnings is well recognised at national level. North east region in general and Tripura in particular is industrially backward. With a contribution of 2.17 % to the states GSDP at current prices the manufacturing sector has noticed the low level of industrialization in Tripura. Prevailing level of industrial scenario demands to highlight the cause of low level of entrepreneurial activities in regard to local resource based micro industry sector in this state. The state has no option to develop the large or medium scale industries due to geographical constraint but to promote entrepreneurial activities by using the local resources, the better example of such industry is a handicraft one, under the umbrella of cluster approach.

Despite the importance of cluster approach, many challenges are associated with the implementation of cluster approach in the state of Tripura with reference to handicraft sector. Socioeconomic issues and other associated problems of the participants of cluster approach in handicraft sector need to be addressed and hence the present study attempts to address the issues of cluster development in handicraft sector of Tripura. In the present study it is also attempted to find out to what extent Cluster Development Programme (CDP) is able to meet such challenges and how CDP will be able to foster the entrepreneurial activities in



handicrafts sector in this State to eradicate the unemployment as well as to strengthen the State's economy by generating income.

### **1.3. Review of Literature:**

#### **1.3.1. Literatures in the Context of International Studies:**

One will find vast body of literature on entrepreneurship focusing on the view point of different discipline contributed by the experts of different fields namely, economics (for example Kirzner,1973, Schumpeter,1934), Management (for example Drucker,1985,), Social science (for example Swedbegr,1993) Anthropology (for example Fraser,1937) etc and as such there lies ambiguity in the definitional point of view of entrepreneurship but from the starting of civilization entrepreneurs have been acting through the system of barter and exchange.

The word 'entrepreneur' derived from the French word 'entreprendre' the meaning of which is 'to undertake' was acknowledged at first by Richard Cantillon in eighteenth century, as a key economic factor who, bearing risk and uncertainty equilibrates supply and demand in the economy.

'Innovation' is the hall mark of entrepreneurship according to Schumpeter. Innovation occurs when entrepreneur introduces a new product, new production method, opens up of a new market, finds out new source of supply of raw materials, introduces new organization in any industry and that is why entrepreneurship in the eye of Schumpeter is a 'force of creative destruction'.

Drucker (1985) opined in the similar line viewing that 'entrepreneurship is an act of innovation'.

Entrepreneurs continuously seek opportunities to minimise costs (Marshall, 1964).

This opportunity recognition is also viewed by Kirzner (1985).

It is also viewed that entrepreneurs are the agents who act for venture creation (Smith, 1967).

Gartner (1985) defined entrepreneurship as creation of new businesses.

Though different views on definitional aspect of entrepreneurship are highlighted but there is no doubt that root of entrepreneurship lies with the creation of business by exploiting available opportunities.

Several studies in developed countries observed the positive effect of clusters in fostering entrepreneurship, such as in USA, Delgado, Porter and Stern (2010), in Germany (Rocha and Sternberg, 2005) and in UK (Potter, 2009). Pe'er and Vertinsky (2006) found that clustered firms had higher survival rate than non-clustered firms in their study of new entrepreneurial entrants in the Canadian manufacturing sectors from 1984 to 1998. The opinion of Arthur (1990) suggests that strong clusters tend to attract more firms. Rocha (2002) opined that clusters contribute to entrepreneurship with the interaction between the geographical, inter-firm network and inter-organizational network dimensions.

The studies in the developing and under developed countries found the early stage of industrialization in most of the clusters. The clusters in developing and under developed countries have the capacity to boost the informal economy by generating employment and income for the poorest of the poor. The reflection of the above information was made from the study of Kumasi cluster in Ghana by Dawson (1992), micro enterprise clusters in Kenya by McCormick (1999), Agra shoe cluster in India by Knorringa (1999) and garment cluster in Lima, Peru by Visser, 1999. Clusters in developing countries follow the low road approach. These clusters are micro enterprise clusters belong to informal sector, produce for local market, using low and simple technologies.

Henry Sandee, Supratikno and Yuwono, (1994) in their paper entitled. "Promoting small scale and cottage industry in Indonesia: An impact analysis for central Java" reviewed the promotion of small scale and cottage industries (SSCI) in Indonesia and its impact on generation of employment. The study was conducted for the province of central Java and field survey was made in six clusters of SSCI to the development investigate the effectiveness of incentives and programs to enhance of SSCI. The study revealed that less dynamic clusters have a little impact on creation of employment but the very dynamic clusters, firms using a combination of technical and financial assistance have a capacity in terms of employment

generation. Present assistance programs are not a cause of employment growth in SSCI but are accommodating such growth.

The observation of the study made by Humphrey & Schmitz (1995) in an IDS discussion paper commissioned by the Small and Medium Enterprises Branch mainly lies with the government support in the clusters and in respect of public support to the cluster, the similarities in both Europe and in developing countries were found. According to the study the public support policy actively taken for relatively advanced stage of industrial development but not for embryonic clusters in European countries. The supply oriented support, consisting the training, raw materials, credit and technology tends to be more than the demand oriented support, public support for SMEs in developing countries. The study opined in favour of effective government interventions with a view to aiming at fostering collective efficiency based on the 'Triple C' which refers customer oriented, collective and cumulative. As per their view, it is not necessary that constituent of 'Triple C' will go together, but an SME support approach, guided by customer orientation and targets the collective is more likely to achieve cumulative improvements in competitiveness.

Baptista (1996) argued that technological innovation is the heart of the dynamic process of cluster growth, accessed by new firm entry and incumbents' growth.

Schmitz (1997) opined that industrial clusters attracts more common 'ordinary' entrepreneurs by facilitating mobilisation of resources namely, financial as well as human. In this context emphasis was given on "Risk able steps." According to him "clustering breaks down investment into small risk able steps, that the enterprise of one creates a foothold for the other, that ladders are constructed which enable small enterprise to climb up and grow It is a process in which enterprises create for each other - often unwillingly, sometimes intentionally - possibilities for accumulating capital and skill." He also stressed upon joint action which in his word are of two types: horizontal and vertical as critical element to improve the ability of clusters towards growth and competitiveness. The Study viewed that Clustering has had only a limited impact in Africa; but in Latin America and Asia

clusters had a positive impact on growth and competitiveness in international markets.

Innovative activity and output are positively correlated with new firm entry and productivity growth (Swann et al, 1998).

Altenburg, Tilman and Meyer-Stamer (1999) referred three types of clusters, namely “survival” clusters, “advanced mass production” clusters and “clusters of transnational corporations” in the context of industrial clusters in Latin America. According to their opinion firms in clusters mostly based on informal sector, located in village or small towns of rural areas, produce low quality consumer goods for local markets are termed as “survival” clusters. The productivity and wage level in such clusters found to be low. Firms in clusters are more advanced and produce for the domestic market but rapidly face the competitive pressure of global market termed as “advanced mass production” clusters. Firms which are technologically advanced world-class manufacturers locate in a particular area, to derive competitive advantage from local external economies, produce for national and international market but few linkages with domestic SMEs and institutions are termed as “clusters of transnational corporations”. Their study suggested making difference between three types of clusters in formulating cluster-oriented policies in Latin America. As the entrepreneurial competence and dynamism is found to be low in “survival” clusters it is the suggestion of the study to design the support measures, aiming at improving the conditions for survival clusters, considering their contribution in creation of employment opportunities.

Nadvi Khalid (1999) examined the role of local business associations in developing country industrial clusters in the context of the emerging challenges in the era of LPG and opined that clustered firms highly require in increasing the internal local cooperation through the business associations within the firms which offers range of functions. According to this study these functions include representing the interests of their members to government, undertaking coordination and regulatory tasks within the cluster and providing members with a wide range of producer services. The study stressed upon to upgrade the local business associations, besides the upgrading of firms, to face emerging global

competition in conducting the case studies of the Brazil's Sinos Valley shoe manufacturing clusters, Guadalajara shoe manufacturing clusters in Mexico and shoe manufacturing clusters of Agra in India, and Pakistan's Sialkot surgical instrument cluster.

According to Porter, (2000) Clusters create an appropriate environment for new starts up for a variety of reason. The inducement to entry often is greater within the cluster due to better information about opportunities. Individuals working in or near the cluster more easily perceive new gaps in products, services or suppliers to fill. Entrepreneurs working within a cluster can easily perceive unsatisfied needs in their geographical area. The required assets, skills, inputs and staff are readily available at the cluster location .One can establish a new enterprise by using these available opportunities. Porter also argued that clusters provide lower entry barrier. The opportunity perceived at a cluster location is pursued due to lower entry barrier. Lower entry barriers, the existence of multiple potential local customers, established relationship and presence of other local firms in a cluster can reduce the perceived risk of entry which fosters the creation of new firms.

Enright and Roberts (2001) opined in favour of long-term commitment of local firms, industries and governments towards the clustering process for the success of industrial cluster. The commitment of local firms and industries includes the trust building, respect and collaboration and common goals. The observation of the study highlighted that government's support for initiatives to foster the development of regional industry clusters in Australia were very weak compared to OECD countries. Based on a commitment to collaboration and the development of an ambitious industry vision Australian national wine industry cluster has been emerged as a successful cluster. The three regional case studies in Australia, namely, Adelaide Metropolitan Industry Cluster initiative, The Far North Queensland Region, Hunter Region Experience in their study indicated that cluster development processes played important role in achieving positive economic outcomes and develop new industries for those regions. Leadership, vision and a long-term commitment to capacity building were considered as key factors for the successful cluster building process in the Adelaide metropolitan area. The Far North Queensland Region's economy, in 1970s was highly depended on

agriculture and was famous in producing sugar, bananas and tobacco has now been emerging as one the fastest growing and internationalized regional economies in Australia. 16 clusters were identified in this region and tourism one of the clusters of that region contributes to over 24 percent of the region's gross domestic product. In the context of Hunter Region Experience the study opined that "it takes between three and five years of learning and capacity building before clustering is embraced by local firms and industries, and that clusters are capable of becoming self-financed. Even then, size is a major factor in industry clusters becoming self-financed".

Enright, M. (2001), in his study mentioned five categories of clusters: working clusters, latent clusters potential clusters, policy driven clusters, "wishful thinking" clusters with a view to characterize the state of development of clusters and based on the characterization, promotional policies for respective clusters be formulated. The study opined in favour of helping the working clusters further their penetration of export markets, the promotional policies required for latent clusters are development of inter-firm linkages, institutions building, and generation of information, the focus of promotional policies of potential clusters need to include the critical mass to become a working clusters, more creative approaches or exclusion for resource constrained programmes to be made for "wishful thinking" clusters.

Rocha (2002) opined that clusters contribute to entrepreneurship with the interaction between the geographical, inter-firm network and inter-organizational network dimensions.

Halder (2002) conducted a study on the Tuttlingen surgical instrument cluster of Germany and for that purpose he carried out 64 interviews through a semi structured questionnaire. Tuttlingen Cluster has been renowned as successful cluster in worldwide. The study finds the lack of trust within the firms in this cluster. The process of assimilating and internalization of external knowledge, to combine it with passive and active cluster advantages are the main challenge for the cluster as per his view. In Tuttlingen surgical instrument cluster the innovative SMEs with a reputation of high quality products and highly skilled workers were

also found, but one will find trajectories in this cluster where classical segment of handhold surgical instruments are “price driven” with competitive pressures increasing in recent years on the other side, the new fields are found to be radical innovations driven.

Van Dijk, and Sverrisson, (2003) in analyzing the dynamics of clustered enterprise development in developing countries focused on different typology of networked manufacturing clusters such as location, Local market, Local network, Innovative, Industrial district. Location type of cluster are those belong to ‘informal sector’ or ‘bazaar’ area, indicated by the proximity of firms (indeed, sharing common premises) and the easy exchange of information the main benefit observed in this cluster and product imitation is the only technical dynamic. Local market type of cluster was based on the facilitation of transactions and reduction of transaction cost or time expenditure and also located in informal sector areas in large towns and cities and indicate the (relative) proximity of many *similar* activities and outlets. Easy access to information is the main benefit of this type of clusters and product development emerged as technological dynamic. The division of labour among enterprises is the main indicators of Local network clusters and specialization is found to be as observed technical dynamic. The specialization offers the development of complementary activities within a networked cluster. Innovative clusters are the export oriented clusters, produce locally developed novelties. Reverse engineering is the observed technical dynamic. In industrial districts the concentration of enterprises with related or similar products are found and such type of cluster is characterized by the evolution of an institutional structure supporting co-operation, innovation and marketing. This formal cooperation leads to joint action and collective efficiency. The study suggested that in order to support clusters at the initial levels of development, space could be reserved for smaller units in existing industrial zones, where co-operative competition would be possible.

Pietrobelli Carlo, Rabellotti Roberta, (2004) studied the impact of collective efficiency on clusters upgrading, in the countries of Latin America and also investigated the impact of different patterns of governance within the chain on the possible forms of upgrading in eleven new clusters in four countries of namely,

Brazil, Chile, Mexico and Nicaragua of Latin America. This study was based on the collection of original data from eleven new clusters of aforesaid countries and extensive review of the literature on clusters. An international team consisting of twelve experts in Italy and in Latin America carried out the empirical analysis. Collective efficiency facilitated by the clusters has a positive impact on the ability of local firms to upgrade. The study observed the different level of collective efficiency in different groups of sectors but passive external economies found to be more common in all clusters. In the context of upgrading, the study observed the process and product upgrading as a common phenomenon for all clusters but not the functional upgrading which is found to be rare. The study opined that cluster support policies need to have a strategic sector dimension and in traditional manufacturing clusters policies should be designed in such a manner that will promote linkages between firms, enhance access to new additional value chains, and ensure consistency.

Rosenfeld (2005) opined that the synergy and scale of clusters can produce economies of scale and cost efficiencies for public sector services. According to him the term cluster has a broad array of functions and resources that appear to act as magnets for certain types of businesses. In that context three types of business clusters were referred, namely, “Innovation clusters” “knowledge Clusters” knowledge based industries; and functional clusters.”As per that reference “Innovation clusters” form around universities and other research complexes; “knowledge Clusters” have become the alternative rural model, claiming clustering around knowledge based industries; and “functional clusters” are that form around common corporate functions such as headquarters, distribution, or R&D.

Rocha and Sternberg (2005) made a study on the impact of clusters on entrepreneurship at the regional level in Germany. The study was conducted by using the multiple regression analysis OLS fixed-effects model to test the hypotheses, taking 97 German planning regions as units of analysis. The study viewed that clusters are better than pure market mechanisms to foster entrepreneurship. In fostering entrepreneurship clusters create three important mechanisms, namely, established relationships, legitimation and complementary linkages which increase the perceptions of opportunities, facilitate the transfer of



necessary resources to exploit these opportunities and encourage the motivation and decision to start a new business due to the higher probability of role models within clusters.

Tambunan, (2005) in his article entitled “Promoting small and Medium Enterprises with a clustering Approach: A policy experience from Indonesia” conducted a study to review the government policies on SMEs with a clustering approach. It is revealed that the development policy has not been so successful in many cases. Neglecting cluster linkage to market is one of the main reasons for the failure. Prerequisite for successful cluster development is the cluster potential to access growing markets in the domestic or foreign level.

Martinez and Montero (2008) made a study to focus on the role of cluster in boosting entrepreneurship and new venture creation. It is found in the study that cluster is capable to incentivize the entry of new companies or start-ups. Cluster facilitates in increased access of inputs, information, technology, institutions which enhances the productivity of the clustered companies boost new venture creation. It is revealed in their study that a balance is reached between co-operation and competition in a cluster.

Dornberger & Utama, (2006) made an empirical study in two Indonesian clusters i.e., wood handicraft cluster in Banjar Gentong and stone handicraft cluster in Banjar Silikarang. The study was conducted on 41 enterprises, chosen randomly in each of the above two clusters shows that joint operation in the form of collective buying, collective marketing is more intensive in Silikarang as in Gentong. Collective efficiency is derived from sub-contracting, (only 16 enterprises in Gentong conduct subcontracting, compare to 39 of 41 samples in Silikarang), joint operation as well as supplier's relation in Silikarang. This study shows that there is positive correlation between collective efficiency and enterprise performance in Silikarang.

Coppock, Roger (2006) in his study of Scottish Forest Industries Cluster (SFIC) of Scotland opined that Cluster approach, opened up the door of resource opportunities to Scottish forest Enterprises the availability of which was absent otherwise. The niche sectors of Scotland's forest industry, such as hardwood sawmilling, and non timber forest products (NTFPs), were enabled to avail such

opportunities which resulted to grow their businesses, in developing the new skills and to improve their efficiency and confidence in using of new technology. Clusters play significant role in improving market network. He opined that the achievements of clusters depend on the strong partnership among all of the participants.

Binder and Byorn, (2006) made a study on the surgical instrument cluster of Tuttlingen, Germany to focus the entrepreneurship in cluster. Theoretical arguments propose that the particulars economic and social environmental framework conditions of a cluster have an effect on entrepreneurial activities in the cluster. However interpretations of the direction of the effect differ substantially.

Pe'er and Vertinsky (2006) made a study of entrepreneurial entrants in Canadian manufacturing sectors from 1984 to 1998. The study observed that survival rates of clustered firms had higher than non-clustered firms in connection with the new entrepreneurial entrants in the Canadian manufacturing sectors from 1984 to 1998.

Nadvi Khalid (2007), in his study examined the relationship between cluster and poverty reduction. The study referred the possible ways in the direction of reduction of poverty through industrial clusters. Clusters facilitating the economies of scale and scope and the externalities in the markets for inputs, labour and information play critical role in enhancing the growth of poor producers and their workforce. Clusters bring the platform for joint action among the poor producers by which local poor clusters able to face challenges and ensure their growth and survival. His opinion favours that clusters do matter to the poverty reduction agenda, and a potentially key policy plank for reduction of poverty and generation of sustainable employment. He also suggested number of issues for taking into consideration to make cluster approach effective towards the pro-poor growth, the prominent of which include raising the competitiveness and networks of local firms within the clusters in a sustainable fashion, promoting labour standards, provisioning in social sector such as health and education, and to strengthen local governance and local institutions.

Ruan and Zhang, (2008) in their study of Puyuan cashmere sweater cluster in China, opined that clustering, as a new business model, in rural industries lowers

the entry barriers of initial capital investment through the division of labour. There were over 3,900 enterprises and family workshops in Puyuan, and 50,000 people which accounted for 38% of the total population and 65% of the total labour force, as workers in the various stages of cashmere sweater production engaged in producing cashmere sweaters and more than 6000 sweater shops in the Puyuan cashmere sweater cluster in China. The study viewed that to ease the constraint of working capital; the clustered SMEs indirectly gain access to credit from informal sources. The availability of flexible payment methods helps buffer credit constraints in their daily operations. Oral agreements typically substitute for formal contracts in the cluster, lowering the transaction costs by increasing the division of labour. The support of local government in Puyuan has taken active collective actions to diminish the transaction costs and the growth of the cluster. The observation of the study indicated in positive effect of cluster in facilitating the entry of numerous new businesses at the earliest stage of industrial development, even the infancy stage of financial sector.

Martinez and Montoro (2008) made an effort to analyse how cluster can encourage entrepreneurship and new venture creation. It is revealed in their study that a balance is reached between co-operation and competition which becomes evident in the higher productivity of the companies because of their increased access of inputs, information, technology and institutions; or in greater innovation and new venture creation.

Potter (2009) argued that clusters stimulate entrepreneurship and innovation because as clusters facilitate localised positive externalities in labour market pooling, input-output linkages and knowledge spillovers in a study of the Minalogic cluster of Grenoble-Isere (France) a globally renowned cluster, specializing in research, development and product design in the sectors of micro- and nanotechnologies and embedded software. In conducting the survey of the said study he found that establishments in the Minalogic grouping in 2006, 40 per cent had started up since 2002. Furthermore, among the cluster's SMEs, more than one in three had started up in 2006, which clearly identifies the capacity of the cluster in favour of creation of enterprise.

The objectives of the study made by Jote (2009) in his research study entitled “Cluster Approach for Enhancing the Productivity and Competitiveness of Micro and Small Enterprises/MSEs/-Case Study on Micro and Small Enterprises” to assess the natural cluster of bamboo micro and small enterprises in Ethiopia and to develop a cluster development process for selected bamboo MSEs entrepreneurs to enhance productivity and competitiveness of bamboo MSEs. The study analyzed the problems and challenges faced by the bamboo sector entrepreneurs of the Addis Abba. The study was based on questionnaire, intensive interviews, focused group discussions and secondary data. The study identifies major constraints namely, lack of working space, inadequate working capital, largely unorganized, dispersed and decentralized activities, lack of continuous technical training, in accessible to get appropriate and sufficient hand tools, lack of continuous bamboo culms supply, lack of marketing place, traditional mode of technology, lack of branding of bamboo products etc. faced by entrepreneurs of micro and small enterprises of Addis Abba. The study opined that cluster approach is a proper mechanism to solve these problems.

The objectives of the study made by Bhatti (2009) entitled ‘Establishing the effect of regional clusters on entrepreneurial activity: Evidence from UK’ are to understand the role of regional clusters and their effect on entrepreneurship and to determine the transferability of traits across natural and cultural boundaries from bench mark or role model clusters in emerging economies. The study was quantitative in nature. The data extracted and merged from four established secondary datasets namely, Euro stat, European cluster observatory, European Innovation Scoreboard, and the UK of the national statistics and the proprietary dataset was made available by the UK team of the Global Entrepreneurship Monitor. The type of research methodology employed is conclusive and casual. The study is a longitudinal as several years of data are combined in order to achieve maximum number of respondents in the data set. The study opined that regional clusters have a positive relationship with entrepreneurship.

Hailu (2010) made a research study entitled ‘Success Factors in Micro and Small Enterprises Cluster Development: Case of Gullele Handloom Clusters in Ethiopia’. The objectives of the study are to take stock of the MSE cluster development in

Ethiopia and to identify the success factors of cluster development and seek ways of how the cluster development initiative in the MSE sector could bring about these success factors. This study was exploratory in nature. The study incorporated population of interest all organizations in the public, private and non-governmental sector involved in the handloom development directly or indirectly. Purposive sampling technique was employed to identify respondents' organizations. Document analysis, semi-structured interview, and focus group discussions methods are widely employed. The study found that the development of strong trust within the cluster community, stability of key actors of cluster development the existence of functional networks adequate physical infrastructures access to finance the level of production technology and market promotion are essential factors in bringing success to cluster development. To sustain the benefits of cluster development efforts, cluster development agents should facilitate the macro and micro environment of the cluster keeping their intervention intact.

Wennberg and Lindqvist (2010) made a study to measure the firm level the macro economic impact of clusters on new firms in creation of job, wage levels and tax payments, taking 4397 Swedish firms have been working under the umbrella of five Knowledge intensive clusters over a period of 10 years, started from 1993 to 2002. The study argued that clusters do provide economic benefits for newly started entrepreneurial firms. The study also observed the strong cluster strength and significant effect on firm survival, job creation, VAT payments and salary payments. The study

Xiaobo Zhang, Lisa Moorman and Gezahegn Ayele (2011) made a study on handloom clusters in Ethiopia. 195 producers in six handloom clusters in Ethiopia were surveyed. The study found that clustered activities in handloom weaving can serve as gateways to entrepreneurship and industrial development in rural Ethiopia. Clustering mode of production system requires lower cost of entry in entrepreneurial activities which is the source of encouragement to many potential entrepreneurs with limited financial resources to participate in nonfarm activities, in the rural sector.

Medhe (2012) observed the positive growth rate in the clusters of micro and small furniture manufacturing firm, working in informal economy in Tanzania which has occurred due to collective mechanisms promoted by clusters. The firms in furniture clusters of Tanzania enabled to reduce transaction cost through collective efficiency. The recommendation of the study mainly focused on improving the quality of product and firm-level management in the furniture manufacturing clusters and suggested that positive initiative of government towards the development of such clusters are the demand of the hour for making such clusters to face the emerging challenges.

Sonobe, Higuchi, and Otsuka (2012) examined the roles of industrial clusters and entrepreneurship in improving productivity and creating jobs, based on empirical study and also on the basis of reviewing the available literature. They collected the enterprise data from the industrial clusters from six countries namely, China, Bangladesh, Ghana, Tanzania, Ethiopia, and Vietnam. The features and growth performances of industrial clusters found to be different. Most of the clusters in Sub-Saharan Africa found to be survival cluster focused on the issues of how managerial and innovative capacities of entrepreneurs interact with localization economies and diseconomies and what impacts they exert on the productivity and employment of industrial clusters. The study viewed that the pattern of dynamic clusters is common irrespective of sector and country. They shared similar experiences of a series of innovations starting with product quality improvement followed by branding, improvements in marketing, strengthening relationships with suppliers, and improvements in management of labour, inventory, and finances.

Viet, N.Q. and Thao, N.M. (2013), studied three Vietnam clusters ,namely the cardamom cluster in Lao Cai province, the Rattan cluster in Quang Nam province, the cassava clusters which were located mainly in rural areas and economically poor regions of Vietnam. They identified that these clusters facilitates in improving employment generation, increasing the value chain by ensuring the internal linkage as well as linkages with urban areas and in accessing the better market. Such type of act of clusters helped in improving the livelihood of poor people. According to

them industrial clusters act as a tool of poverty reduction by linking the economically backward rural areas to growth centres.

The better performances of micro enterprises in wooden clusters in Zimbabwe in compared to isolated enterprises was found by Kamoyo et.al (2014) and there appears positive growth effects in clustered firms due to economies of scale but due to lack of capacity building entrepreneurs in clusters could not be able to exploit the gains accrue from clustering in competitive financial advantage and training.

Ayako, Matous, Yasuyuki (2014), in their study the effect of business networks on growth of firms in survival cluster of microenterprises in Ethiopia were examined and opined in favour of significant contribution of business networks in promoting growth of sales through improving availability of inputs and sharing of networks in the cluster and improved skill growth through knowledge diffusion but skill growth is found to be no impact on sales growth due to the lack of consciousness of customers who are mostly local consumers in regard to the quality of products. As per their opinion “indifference to product quality of both consumers and producers in the localized market may reinforce each other, leading to the stagnant and survival nature of the cluster.” The study suggested that creating ties with urban markets is way to develop survival clusters from the subsistence level

### **1.3.2. Literatures in the Context of Indian Studies on Industrial Clusters:**

Mathew, (1997) in his article entitled “From beautiful ‘Small’ to Flexible Specialization – Asian experience of small enterprise development” focused that pragmatic approach for developing entrepreneurial culture for promoting small enterprises in Asian countries is the need of the hour. Besides physical presence of clusters and networks, a thriving entrepreneurial culture is necessary for effective operation of flexible specialization. In most Asian Countries, with the basic agrarian dominance of their economics, enterprise is something alien to the common people. Due to this conscious effort to nurture entrepreneurial culture is required.

Das, (1998) made a study of a Indian Industrial Cluster in which the complex character of a typical cluster in a developing country was highlighted. Various aspects of organization of production, the process of internal differentiation,

competitive strategies of the firms, collective action and conditions of labour were analyzed in this study. This study suggested that promoting clusters would have to be based on mutual trust and networking in the non-competitive areas such as ensuring product quality and enhancing standards of employment.

Russo (1999) conducted a study on “strengthening Indian SME clusters: UNIDO Experience” in which detailed report on UNIDO’s cluster development programme in the context of strengthening Indian SMEs was made. The aim of the programme is to develop sustainable Indian capabilities to promote SSI networking and cluster development. UNIDO’s experience in India indicated that three to four years is a minimum period to generate a sustainable development period to generate a sustainable development process at the cluster level. Cluster approach could become an effective new way for promoting SSI development in India is the main conclusion of this study.

Clara, Russo, and Gulati, (2000) in their paper entitled “cluster development and BDS Promotion: UNIDOS experience in India.” Sponsored by United States Agency for International Development (USAID), Mekong Project Development Facility (MPDF), committee of Donor Agencies for small Enterprises Development and UNIDO Sponsor German Technical Co-operation Agency (GTZ) presented the experience of the UNIDO cluster Development program in India. It is pointed out that very same program has been successfully introduced in many other industrializing Country. (UNIDO, 1999).

Bandyopadhyay, Saurav (2001) analysed the economic performances of the firms in selected clusters of India in post reform period. Data on indicators of performance of clusters was collected from the Small and Medium industries of some selected clusters , namely, Khurja glass and glass product cluster, Ambala scientific instrument cluster, Sivakasi safety matches cluster, Aligarh lock-making cluster, Ludhiana woollen Hosiery and knitwear cluster, Tirupur cotton knitwear cluster, Agra leather industry cluster etc, on the basis of purposive sampling. The study of economic performance of firms was made with the help of indicators which reflected the financial performance, mode of finance and export intensity. Two ratios namely, Gross Margin to Gross Block, and Earnings Before



Depreciation and Taxes (EBDT) to Net Worth, as indicator of performance were employed to make the study. The study found that small and medium industries in clusters were in a position to move them towards flexible specialisation by combining multiple skills through the adoption of integrated approach. The productivity performance of clusters are found to be high in export oriented cluster like Tirupur, and also in Woollen Hosiery and knitwear, scientific instrument, glass and glass product. The study was in the view of positive and greater responses of manufacturing units in industrial cluster which were in the transitory phase, in the changing economic scenario in the era of reforms.

Kharbanda (2001) analysed how Indian small-scale industrial units had been facing the knowledge oriented challenge and how such industries, sharing knowledge through cluster, enabled for making them internationally competitive. The studies viewed that cluster facilitating the SMEs in accessing new technology enhancing the flow of knowledge in the industrial units within the clusters. In the word of Kharbanda the creation of knowledge network through cluster is 'honey beehive', where every cluster participant unit regularly shares the knowledge and benefits. Clusters are capable in creation of innovative atmosphere and entrepreneurial dynamism.

Mathew (2005), in his observations on the bamboo and rattan cluster in Kerala, highlights that the absence of appropriate marketing institutions restricts the growth potential of the cluster. The lack of proper market information, and lack of credit, has been emerged as major hindrances to the artisans. Artisans are forced to compromise with quality due to the pressure of the traders/middleman which was found in the silver filigree cluster in Orissa. In that cluster, traders force the artisans to work with cheaper impure silver to maximise the traders' return and undermine the scope for sustained improvement of the product profile of the cluster.

Das Keshab (2005) in his working paper analyzed the complexities in the functional dynamics of SMEs clusters of India. He opined that in less developed countries in general and India in particular, the informal nature of functioning is associated with clusters. In the era of globalisation, to face the global challenges

and to make the Indian MSMEs in globally competitive the introduction of cluster approach is essential but clusters are required to enhance networking and besides the upgrading skills of labour, flexible norms of work and quality control, required in encouraging the competitiveness in SMEs, equal stress is required socio-territorial context, especially, in ensuring the social security measures for workers for healthy growth of industrial clusters.

Kuchiki, (2005) in his article opined sufficient conditions which include establishment of industrial zones, capacity building and invitation of anchor firms together with their related firms for formation of industrial cluster typical in Asian manufacturing industry and also provided theoretical support for the sufficiency of these conditions in enhancing the regional economic growth. The typical pattern of forming industrial clusters in East Asia is theorized by defining “Quasi- public Goods” and the study found that industrial cluster policy enhances economic growth under a production function of ‘increasing return to scale’. Critical amounts of production of scale economies for firms are deciding factor in investing in industrial cluster.

Okada, and Siddharthan, (2007) in their study of two India auto clusters, namely, Chennai and the National Capital Region (NCR) made a comparison between the firms within the clusters and the firms which are excluded from the clusters in respect of their performances and analyzed the patterns of agglomeration of the Indian automobile industries. The econometric analysis was employed for examining the differential patterns of behaviour between clustered and non-clustered firms. The availability of high levels of human skills is the common feature of both the clusters along with viable pro-industrial Government supports. The easy access to seaports and a pool of educated workforce, and the State Government’s good leadership are the major causes for agglomeration of auto component manufacturers in Chennai. In the developmental pattern of Chennai cluster no role of anchor firms is found as per Kuchiki’s “flowchart model” which was found in the auto cluster in the NCR where Maruti Udyog Limited has emerged as an anchor firm and played vital role in developing the related firms of auto component. The basic difference between the Chennai auto cluster and the National Capital Region (NCR) auto clusters as per their study lies with the

Kuchiki's "flowchart model." The NCR auto cluster confirms this model but Chennai auto cluster did not confirm this model. The availability of high levels of human skills is the common feature of both the clusters along with viable pro industrial Government supports. The study viewed in favour of positive influence of cluster in the performance of the auto component firms. Firms under the umbrella of cluster perform better than the non-clustered firms in both the clusters.

Venkataramanaiah and Parashar S.P.(2007) in a study of five auto clusters of India, namely Chennai auto cluster, Pune auto cluster, Gurgaon auto cluster, Pithampur auto cluster and the Andhra Pradesh Auto Cluster observed the significant contribution of clusters in increasing productivity ,improving the inter firm relation and enhancing competitiveness. The observation of their study mirrors that successful clusters are capable to fulfill the demand of the global market in the changing global economic scenario. Their major suggestion for enhancing competitiveness includes promotion of marketing through fairs and missions abroad, establishment of export consortia.

Das Keshab (2008), in his paper entitled 'Fostering Competitive Clusters in Asia: Towards Inclusive Policy Perspective' viewed that clusters are strong enough to activate the local economies through creating opportunities for new and productive employment and progress in the sphere of technology resulting upon enhancement of competitiveness of SMEs. There is a scope for cooperation between Asian nations in the sphere of production, technology as well as market through clustering. It is found that significant proportion of total clusters in Asian region located in small town and rural areas and most of clusters are low tech clusters. The benefits accruing from clusters are not to be generalized across different nations. He referred the three key determinants, namely, strength of networking, nature of informalisation, and the macro policy environment of cluster dynamics and nature of informalisation emerged as vital determinant. It is viewed that the successful clusters in European countries, through a range of intervention focused on enhancing the labour productivity, including better working environment and provision of real services, but most of clusters in Asian developing countries are characterized by informal production process, poor working conditions with low wages. In developing economies of Asian region Besides Competitiveness and

innovativeness in the constituent firms, broad-based cluster promotion strategy is suggested in addressing a set of complex issues with a pragmatic approach. The suggestion includes 'Cluster Grid' on basic cluster information as a initial steps towards "dynamic" inclusive cluster promotion strategy and positive role of the state in improving basic infrastructure and labour dimension to make an effective cluster promotion strategy for the economic development of Asian developing countries.

Vijayabaskar, M (2008), made a study on the export oriented clusters to examine the qualitative improvements in generation of employment and decent work in those clusters as in the line of the success in the globalised product market. The study was conducted with successful Indian export oriented clusters of five sectors Textile and Garments, Leather and Footwear, Gems and Jewellery, Auto Components, and Artisanal Clusters on the basis of secondary literatures. In the study it is observed that the workers were in better position in the pre export era in respect to employment security and flexible mobilization. In the export phase one will find the division of labour in the regime of flexible productivity .The rate of wages was increased for skilled workers only but there was no increase in the case of real wages though the value chain within the clusters was improved through the high growth and upgraded products which were the outcome of the Endeavour of workers. The study observed the lack of positive relationship between outcomes of the labour market and up-gradation of product market. The division of labour in artisanal clusters was observed as caste-based but sector level intervention did improve the conditions of workers, of artisanal clusters.

Saxena, (2009) in his study opined that clustering approach in SME may reduce the internal competition by establishing mutual trust among them. The unique opportunity provided within the microcosm of a cluster to the individual – SMES collocated is that they can explore, analyze, understand and experiment with strategies to counter internal competition. Clusters facilitate one to learn shifting mechanism for moving from a 'piece based competition' to a 'pricing based competition' and 'price based competition' to 'product based competition'.

Roy (2009) made a case study on Kolkata footwear cluster based on the randomly selected 48 sampled units from Kalabagan, Rajabazar and Tantibagan areas of this cluster. This paper critically examined a typical 'low - road' cluster in Kolkata. The study viewed in the favour of horizontal growth of the firms without encompassing with new technology. The vision of the owner irrespective of small and large firms found to be limited due to low level of education and they are very much satisfied in availing the local or regional market. The absent of vertical integration was observed in the study. The nature of cluster was found to be fragmented which stimulates in promotion of share of margin of traders but manufacturer's share of margin tends to be reduced. This is the constraint to Kolkata clusters as remained as 'low-road' cluster and inability to give birth big manufacturers like Bata, Elite and so on. Asymmetric power relations and conflicts arising between the trader and the small producer reproduce a production relation which makes hindrances in the direction of the growth of high road path. The Government level interventions related to leather industry needed to be designed considering the high road growth in SME clusters. The study referred the use of modern technology, the use of qualitative raw materials instead of reducing costs in wages which would in a way counterbalance the trends of self-exploitative fragmentation and prevail on consolidation to reap the benefits of scale advantage.

Sengupta (2009), Chairman, NCEUS, Govt. of India, New Delhi, stressed upon cluster approach as a policy initiative for the development of micro and small enterprises. The NCEUS of the view that the development regions through growth poles assumes superiority over other approaches as it embraces the concept that productivity can be increased by realising external economies of agglomeration that could be gained by clustering.

In the "Study on Rural Cluster Development of India" by the research team of Society of Economic and Social Transition (SEST) under the guidance and chairmanship of Dr. S.P.Gupta, had referred two types of clusters, namely, "natural clusters" and "induced clusters" which were found in India. According to the opinion of the study "natural clusters" are formed spontaneously for taking advantage of locally available skills, raw materials, proximity to market etc and the

clusters set up by government or other agencies by creation of infrastructure accompanied by a range of technical services designed to cater to a group of units in a local area are termed as “induced clusters.” The study found that besides induced clusters, there are natural clusters also where small-scale entrepreneurs of units having similarities in products, services or raw materials have grouped themselves into informal clusters to avail the benefits of group action. The study found that the present scheme of assistance to clusters are not adequate and opined in favour of provisioning more training facilities and improvement of technology along with expeditious one window service of the financial institutions for making the clustered industries more effective.

Muthuvezhappana, (2010) made a study on steel manufacturing cluster in Kumbakomam, Tanjore district of Tamilnadu. This cluster is an artisan type cluster and a majority of the units are in cottage scale. Non availability of finance is the major bottlenecks being faced by the industry coupled with less drive by the members to accept the modern changes and challenges faced by this sector.

Chawla, (2011) focused that cluster related policy, support and developmental interventions have a significant impact on the functioning of local industrial milieu and as well as on macro level. Cluster approach is the answer of the micro and small enterprises to the large scale sector of the country and the world.

Das and Das, (2011) conducted a study on “industrial cluster: An approach for rural development in North East India”. The Study revealed that cluster approach has positive contribution to the economic development as it has capability to generate income in rural as well as urban sector by promoting small enterprises in the N.E.R.

The objective of paper by Barkakoty and Borah(2011) mainly focused on to explore the investment, effectiveness and sustainability of training in the micro enterprise sector in state for entrepreneurial creativity, leading to removal in income disparity among the rural population in the state. Simple random sampling was used for chosen the respondents. Leader in entrepreneurial clusters in rural and semi urban areas, of the training programs formed the Universe of study. Structured questionnaire was prepared for pre and post training assessment purpose

and distributed to each respondent. Data was collected from State Institute of Rural Development, Assam which generates detailed sector wise data for the completed micro entrepreneurship training programmes. Six years SIRD publication w.e.f. 2000-01 to 2006-07 was used for that purpose. Only limitation is that four different training programmes has been used namely SGSY, CNJJ Swaniojan Jojana Employment Generation Mission and Bijoy Nagar Handloom Development Project BIHCDP which uses varying training methodologies study observed that training programme has positive impact in increasing the level of motivation, expectation level and knowledge level.

The objectives of the study made by Venkataramanaiah S and Ganesh Kumar N. (2011) are to identify the various problems faced by the cluster units and to improve the competitiveness of the cluster units. This paper is based on comprehensive field survey and conducted using Time Study and Process Flow Analysis. An approach of Self Help Groups (SHGs) consisting of unit holders and Artisans was proposed in order to improve the operational efficiency and competitiveness of the cluster units. This mechanism will help the stakeholders to share their technical expertise and design skills of Artisans and scarce resources available within the cluster which ultimately promotes cooperation among clusters units and leads to sustainable development. The Study found that significant gains in productivity are possible with minor modifications in the production process which leads to help in improving the competitiveness of the cluster units.

Uchikawa (2012) in his study made a comparison between two Indian knitwear clusters, one is Ludhiana, a domestic market oriented cluster and another is Tiruppur, an export oriented cluster. The study found that both the clusters significantly contributed in generating neighbouring villages in addition to migrant labours. The improving trend of household income in neighbouring villages was observed. Four similarities between two clusters were observed. One of which was vertical net workings and other was flow of market information which was shared among producers through intermediaries. Collective efficiency was well functional in both the clusters which facilitate the division of labour. Agricultural workers in

Tiruppur became owners of the firms but this scenario was absent in Ludhina. The study viewed that entry to the apparel industry found to be easy in both the clusters.

Chawla (2013) in her empirical study in Panipat textile cluster examined the perception of the artisanal clusters and impact of innovation on such clusters and made an evaluation of the impact of clusters on regional entrepreneurship development. The study found the positive impact of cluster on entrepreneurship. The industries in cluster area not only provided the employment generation of around two lacs people but increasing trend of handloom export was also observed in this study. The share of Panipat cluster in Haryana handloom export was increased to 94.28% in 2008-2009 from 84-04% in 1992-1993 as per her study.

Vaskaran (2014) focused in his study the physical and financial performance of village industries clusters exists in India, run under the SFURTI Scheme, applying the statistical analysis, namely, Correlation Analysis. The data was collected from KVIC, Government of India, and analyzed with the help of Data Analysis of Input Oriented Banker Charnes Cooper (BCC) Model. The number of Artisans Benefited and Productions are considered as Inputs and Annual Sales as well as Exports as Outputs. The study found that overall efficiency of the village industries clusters in India is satisfactory. SFURTI Scheme is properly implemented for the development of clusters of village industries as a result the Return to Scale of Bee-Keeping Clusters are increasing.

Das (2015), made a case study on five rural artisan clusters in the five states of India, namely, leather footwear cluster of Karnataka, appliqué cluster of Odisha, handloom cluster of Madhya Pradesh, clay-terracotta cluster of Rajasthan, bamboo craft cluster of Assam to examine the nature of institutional constraints to innovation. The study viewed that rural enterprises in the clusters are the producers of low-end products with a poor earnings and very little or no innovativeness. The study indicated the extant institutions lack coordination, progressive vision and a *feel* for the context within which these clusters function. *Artifact-centric*



technological dynamism is a precondition for transforming the ‘production’ clusters into ‘innovation’ clusters. The study opined in favour of institution-*centric* innovation system which fosters the ability of the firm’s for upgrading in attainment of higher degree of competence and accomplishing the business activities in a pragmatic and cooperative manner. The study further pointed out that it is the urgent requirement to minimise the extant of informality in rural artisanal cluster, the state should take care in this regard to facilitate craft promotion and livelihood of artisans.

The study of the above literatures reveals that cluster approach has gained the popularity in countries across the world as a tool for economic development. Clusters play positive role in promoting entrepreneurial activities both in developed and developing countries. Most of the clusters in developed countries are high-tech clusters and their contribution is very much extended from employment generation with welfare of labour to export earnings. The formal nature of functioning is associated with clusters in developed countries. On the other side clusters in developing and under developing countries are found to be low-tech clusters. Informal nature of functioning is associated with clusters in developing countries.. The contribution of low-tech clusters is limited within the generation of employment but not export earnings. The contribution of clusters in entrepreneurial activities is remained same in both of low-tech and high-tech clusters. Low tech clusters promote the rural economy stimulating the entrepreneurship in rural marginalized section of the society. It is evident from the above literatures that clusters do provide positive entrepreneurial environment to enhance the growth of SMEs and improve their competitiveness in the era of globalization.

#### **1.4. Gap in Existing Literature:**

Survey of available literature reflects that cluster plays a significant role in increasing the industrial growth of the nation which in-turn promotes entrepreneurship in MSME sector. Considering its significant contribution, countries irrespective of developed and developing economy, across the world adopted this approach for stimulating the economic growth of the nation as observed from the available literatures. Several studies were made in developed and developing countries to study the role of cluster approach on SSI sector but research work has not been made to study the role of clusters in promoting entrepreneurial activities in the state of Tripura. The present study, therefore, is a *pioneering attempt* to study the role of Handicraft Clusters in promoting entrepreneurship development in the state of Tripura.

#### **1.5. Significance of the Study:**

The significance of the present study mainly lies with the development of entrepreneurship at grass root level through the cluster approach in the state of Tripura. The handicraft industry is mainly based on house hold sector of rural area, where the marginalised segments of the society (i.e. women, SC, ST, and OBC) are engaged in entrepreneurial activities. The people engaged in this sector as artisans have limited access towards different available benefits and they are unprivileged section of the society. The country's motto towards inclusive development requires bringing this segment under the umbrella of financial inclusion and economic empowerment. The study focuses upon prevailing entrepreneurial activities under the umbrella of cluster approach in India in general and examines the impact of cluster approach in promoting handicraft sector in the state of Tripura, in particular, with a view to move towards the direction of inclusive entrepreneurship in this state.

The findings of the study may be useful for Planners, policymakers, implementing authorities, as well as researchers for initiating proper action not in terms of budding entrepreneurship in handicraft sector only but for social inclusion and women empowerment.

## **1.6. Objectives of the Study:**

In the present study stress is given to delineate entrepreneurship development in the State of Tripura. However the issue of entrepreneurship development especially in the case of Tripura, a land locked geographically isolated state of the region of the North East is highly complex and intricate. The objective and scope of the present study is inevitably limited to foster entrepreneurial activities through cluster approach in Tripura. The specific objectives of the present study are:

- i) To assess the role of clusters in entrepreneurship development in MSMEs with special reference to handicraft sector in India in general and Tripura in particular.
- ii) To examine the socio-economic profile of the participants of the handicraft clusters in Tripura in terms of age, income, and training.
- iii) To examine the impact of the cluster development programme in handicrafts sector in Tripura

## **1.7. Research Questions:**

Tripura is in a position to promote local resource based industry as the state has a vast resource potential but there exists low level of industrialization which makes hindrances to foster entrepreneurial activities. The prevailing situation demands to get the answer of the following questions for increasing economic growth of the state by developing entrepreneurship. The questions are:-

- i) What are the challenges of the cluster approach to the promotion of entrepreneurship development in the State?
- ii) What role the cluster Approach may play in promoting entrepreneurship in this state?
- iii) To what extent the cluster development program has been implemented in this state?
- iv) What are the changes required to be made in making the cluster development programme effective in entrepreneurial development?

## **1.8. Methodology:**

### **Sample Design:**

Two stage sampling method is used to conduct this study.

- In the first stage sampling, out of eleven clusters in five districts approved by the Department of Handicrafts, Government of Tripura, five clusters are selected randomly from three districts.
- In the second stage sampling, the artisans are selected from the aforesaid clusters. Out of total 3203 artisans in sampled cluster area, 192 artisans are taken as sample using Yamane's formula at 7% precision level and 95% confidence level. Yamane's formula:  $n = N/(1+N (e)^2)$ .
- Out of 192 artisans, 38 are male artisans who are participants of cluster as non-registered cluster member and 154 are female artisans who are participants of cluster as registered cluster member.
- An experience survey is conducted.
- Out of 22 knowledgeable people in the field of handicraft sector, in Tripura, interview was conducted with 12 such knowledgeable people who include Shilpa Guru Awardees, National Awardees and National Merit Awardees.

**Data collection:** The study is conducted with the help of primary data as well as secondary data.

**Collection of Primary Data:** The primary data was collected through field survey. The field survey was conducted through personal interview with the help of interview schedule. The address of the concerned cluster was collected from the Department of DHHS, Government of Tripura and the operational area of concerned cluster and the name of artisans were collected from the Managing Director, (a Government employee) of the concerned cluster. An interview schedule was prepared which was structured in nature in consultation with my respected guide and co-guide and the Deputy Director of Handicrafts, Government

of Tripura, who is an expert on cluster. The pilot study was made to finalize the schedule.

**Secondary Data Source:**

**Following are the some important secondary data source:**

- ✓ UNIDO report on clusters and SMEs Clusters,
- ✓ Basic statistics of N.E.R,
- ✓ Report of Planning Commission, GOI.
- ✓ Annual Reports SSI & MSMEs, Government of India.
- ✓ Reports of Economic census, Government of India.
- ✓ Reports of census of SSI, Government of India.
- ✓ Report of Census of Handicraft artisans, NCAER, 1995-96,
- ✓ Policy and status paper on Cluster Development in India, 2007.Foundation for MSME Clusters.
- ✓ Working Group Report on Handicrafts for the 12<sup>th</sup> Five Year Plan, Government of India.
- ✓ DC Handicrafts cluster cell, Government of India.
- ✓ Report of "Expert Committee on Small Enterprises". Government of India.
- ✓ Report on the Role of Incentives in the Development of Industrially Backward States. Ministry of Commerce & Industry, Government of India.
- ✓ Report of Prime Minister's Task Force on Micro, Small and Medium Enterprises 2010, Govt. of India
- ✓ Report of the Inter-Ministry Task Group on Technological, Investment and Marketing Support for Household and Artisanal Manufacturing, 2005 Planning Commission, Govt. of India.
- ✓ Statistical Abstract 1967, Government of Tripura.
- ✓ Economic Review, 2002-03, 2012-13, 2013-14, 2014-15, Government of Tripura. Population statistics, Government of Tripura.
- ✓ Press Release, Press Information Bureau, 29-August-2011, Government of India Ministry of Textiles.

### **Data analysis:**

The IBM SPSS Statistical Version 20 has been used to analyze the collected data. Accordingly the proper entry of collected data were made and tabulated. With the help of the Chi Square test and Descriptive statistics, using the SPSS Tools the data are analyzed. The analysis is made to find the impact study adopting the

i) “Before and After Approach.”

ii) ‘With or Without Approach’.

It is observed in the field study that out of 192 sampled artisans as participant of sampled clusters area, 98 artisans have been performing their entrepreneurial activities in handicraft sector since 1980 i.e. before the introduction of cluster approach. Their entrepreneurial status, in the regime of cluster approach is compared with before the introduction of cluster approach.

In the present study “With or Without Approach” is also followed to assess the impact of cluster approach. Out of 192 sampled artisans as cluster participant, 154 female artisans are registered member of cluster and 38 male artisans, who are non registered cluster participant of concerned cluster area and not directly get benefit from clusters but benefit accrue from clusters are availed by them. Effort is taken to make comparison between ‘female’ as registered cluster participant, who are considered as the constituent of ‘with the approach’ and ‘male’ as non-registered cluster participant considered as the constituent of ‘without the approach’ in respect of level of education, training, use of different marketing Channel, income and enterprise run with hired workers under the method of ‘With or Without Approach’

The variable which is associated with the benefit derived from clusters as per review of literature in promoting entrepreneurship is considered to analyze.

As the IBM SPSS Statistical Version 20 is used , the details of the test performed are not furnished here as SPSS gives only result of the test in the form of Chi Square value, Degree of freedom and p value which are provided inside the tables relating to each of the socioeconomic characteristic are concerned.

The interpretation of calculated Chi Square value is based on p values given inside the table under the SPSS tools.

- \* If p value is less than 0.01, then considered significant at 1% level of significance
- \* If p value is more than 0.01, then considered insignificant at 1% level of significance
- \* If p value is less than 0.05, then it is considered significant at 5% level of significance.
- \* If p value is more than 0.05, then it is considered insignificant at 5% level of significance.

In addition to Chi Square test, data is also analysed through Ratio, Pie chart, Bar chart, using Microsoft Excel.

An experience survey is also conducted to find the impact of the cluster. There are seventeen national awardees including two Shilpa guru awardees and five national merit awardees in the state who are expert in this field and more than twenty five years experience except one. Out of these 22 experienced people in this field twelve people are randomly selected.

## **1.9. Chapterisation:**

**Chapter 1: Introduction:** 1.1. General introduction. 1.2. Statement of the Problem 1.3. Review of Literature. 1.4. Gap in existing Literatures. 1.5. Significance of the study. 1.6. Objectives of the study. 1.7. Research questions. 1.8. Methodology. 1.9 Chapterisation. 1.10. Limitations of the study.

**Chapter 2 : Growth and Development of MSMEs in India vis-à-vis Tripura: a Comparative Analysis:** 2.1. Conceptual Framework of MSMEs. 2.2. Growth and Performances of MSMEs in India. 2.3. Growth and Performances of MSMEs in NER. 2.4. Growth and Performances of MSMEs in Tripura. 2.5. Comparison between Growth and Performances of MSMEs in India and Tripura. 2.6. Handicraft sector: – Importance, Growth and Performances in India and Tripura.

**Chapter 3: Role of Cluster Approach in Entrepreneurship Development in MSMEs India and Tripura:** 3.1. Evolution of Industrial Cluster Concept. 3.2. Introduction of Cluster Approach in the field of SSI sector in India. 3.3. A brief outline of Industrial Clusters in India and Tripura.3.4. Contribution of Clusters in SSI sector in India.

**Chapter 4: Socio Economic Profile of the Handicraft Clusters Participants of Tripura:** 4.1. A brief outline of Sampled Clusters. 4.2. Socio Economic Profile of Agartala Cluster. 4.3. Socio Economic Profile of Jogendranagar Cluster. 4.4. Socio Economic Profile of Charilam Cluster. 4.5. Socio Economic Profile of Nalchar Cluster. 4.6. Socio Economic Profile of Baikhora cluster 4.7. Socio Economic Profile of the Sampled Handicraft Clusters: a Comparison.

**Chapter 5: Impact of Cluster Development Programme in Handicrafts Sector of Tripura:** 5.1. Impact study based on ‘Before and After Approach’.5.2. Impact study based on ‘With or Without Approach’.5.3.Statistical Analysis.

**Chapter - 6: Summary of Findings, Suggestions and Conclusion:** 6.1.Summary of the Thesis. 6.2. Findings relating to objective No – 1. 6.3. Findings relating to objective No – 2. 6.4. Findings relating to objective No – 3. 6.5. Suggestions. 6.6 Conclusion.

### **1.10. Limitations of the Study:**

The scope of the present study is confined to handicraft clusters in bamboo and cane sector, setup and monitored by the Department of Handicrafts, Government of Tripura in this State. Clusters other than handicraft sector i.e. Handloom, Sericulture and Coir clusters etc is not taken into consideration in this present study. The field survey for collection of data is made during the period of 2012-13& 2013-14. Hence the findings of the study will by and large reflect the situation specific to this time period only. The study is based on primary data which is collected through interview schedule using random sampling method and their responses are exhibited, and secondary data were collected from the official records of THHS, Government of Tripura. Therefore a cautious approach is to be adopted for making any kind of generalization of the findings of this study.