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Investigation of Industrial Rated Clusters in Iran and Other Selected Countries

Seyed Vali Mirhosseini¹

Mohammad reza GHanbari²

Abstract: All countries hope to achieve increasingly developments which grow fast. Nowadays many developed countries are using strategy of industrial clusters development because they influence the competitiveness of industrial clusters in the country as well as beyond national borders and show new ways of thinking about the place of dealing and earning. Industrial clusters influence competition through increasing of productivity based on settlement of companies and providing quick guidelines for development and innovation and encouraging of new business. Industrial cluster is one of new combined methods of various theories such as theory of economic geography, regional economics, national innovation system, transmitting knowledge theories, social capital theories and social networks. Recently this method in Iran attracted many attentions based on industries compatible with mentioned method which attempts to provide a better and competitive market place for the country, region and the world. This paper defines the expression clusters, its types, objectives and benefits and then provides two hypotheses. First hypothesis is that Government has a fundamental role in growth and development of the rated clusters and the other hypothesis is that the more old and strong relations between companies exists the better and stronger industrial clusters they will have. And then this paper investigates the situation of rated clusters in Iran and finally discusses policies of selected countries for development and growth of industrial clusters to be used if it is according to the situation of Iran.

Key words: Industrial rated clusters; Small and Medium Industries (SME)

1. INTRODUCTION

All countries hope to achieve increasingly developments which grow fast. Nowadays many developed countries are using strategy of industrial clusters development because they influence the competitiveness

¹ Lecturer of Payame Noor e Yazd University, Yazd, Iran & PhD candidate, Faculty of economics, Allameh University, Tehran, Iran. Email: VMir1345@yahoo.com.

² Assistant professor, University of Allama Tabatabaie, Tehran, Iran. Email: drghanbari29@yahoo.com.

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of industrial clusters in the country as well as beyond national borders and show new ways of thinking about the place of dealing and earning. Industrial clusters influence competition through increasing of productivity based on settlement of companies and providing quick guidelines for development and innovation and encouraging of new business. Industrial cluster is one of new combined methods of various theories such as theory of economic geography, regional economics, national innovation system, transmitting knowledge theories, social capital theories and social networks. Recently this method in Iran attracted many attentions based on industries compatible with mentioned method which attempts to provide a better and competitive market place for the country, region and the world. As was mentioned above industrial clusters phenomena does not refer to a long period in the past and most developed models have some theoretical weakness and they are only theoretical patterns borrowed from other countries which are matched with internal situation of countries. Nowadays this approach attracted attention of many international organizations like the World Bank, International Monetary Fund, OECD, EU, ILO and other organizations. However, this approach has established its position as one of the economic development tools.

A new approach proposed nowadays in the discussions of regional and industrial development is that different regions depending on, natural, human and organizational advantages or available industrial should pay serious attention to the development of a limited number of industrial clusters and facilitate different dimensions for organization of clusters. In these situations they can be successful in international markets and hold more valuable sectors of related goods from their value chain and they can reform or reconstruct existing structures against world problems. Nature of the new cluster phenomenon is such that because of lack of explanation and the correct definition of these concepts there is no coherent classification. Some people consider it as a part of policy innovation that can be investigated in the form of national innovation system. Some people consider it as an economic phenomenon which is placed among the economic policy making factors because of its economical advantages. Some people put it in extended field of policy making and some people put it in industrial policy field. Different countries of the world understand various benefits and interests of industrial and use different strategies and policies in order to increase development of these industrial and also they use the results of their implementation in a better way. Considering the existence of industrial clusters of in Iran and by considering the successful implementation of industrial cluster strategies in other countries we clearly understand that there is a need for implementation of industrial clusters in order to achieve industrial development as soon as possible with more speed and less expenses.

2. INDUSTRIAL CLUSTER DEFINITION

Theoretical basis of phenomenon clustering or aggregation proposed in first time in the theory of Alfred Marshal in 1890 called "*Economic advantages resulting from aggregation*". According to Porter (1998) cluster is a collection of interconnected enterprises and cooperative institutions in the same geographical areas which connect together in a specific field with their common complementary characteristics.

3. OBJECTIVES OF INDUSTRIAL CLUSTERS

According to statistical analysis performed on more than 500 clusters around the world different goals has been mentioned for the institutions to attend an industrial cluster. These objectives are presented as following after classification in six categories which separates them from each other:

- (1). Making a network of all institutions and performing common researches
- (2). using of policy guidelines
- (3). Making business cooperation between institutions
- (4). Optimized using of education according to institutions needs

- (5). Using of innovation and technology of other firms
- (6). Using of benefits resulting from further development of industrial clusters

We can be hopeful for future of industrial clusters if we achieve at least 4 out of six goals in the mentioned cluster. In this regard different countries for making have considered one or more above mentioned objectives as industrial clusters of one or more target categories above objectives as the main purpose of making clusters and considered other objectives as sub-objectives. Making a connections and network making are among the most important objectives of each collection. This objective in some clusters has created automatically, but some of them in other clusters require more appropriate policy making.

4. TYPES OF INDUSTRIAL CLUSTERS

Different clusters have been developed by experts of programming and developments based on the nature of regional planners, time of its establishment, type of their public behavior and they are classified to some groups for example, some clusters such as clusters of Japanese, European, Scandinavian, Eastern Block, under developing countries and American clusters which attempt to find a special culture within the clusters. In other categories clusters are classified as export-oriented or introspective clusters that are in a restricted area. Also these clusters are classified based on a trademark or free expansion. One of the most classifications of clusters is division of clusters in to the value chain and workforce treasure. In this category, production units have vertically output – input relation. In the cluster classification as workforce treasury the workforce members correlate with clusters which are active in a focused production chain or in one field .They make special and professional field of working which attracts a special force that first attracts skilled forces from other regions and secondly provides special education services to raise teacher 's skills clusters related to the clusters which are firstly abundant in the market and service unit need not to search for all needed workers .Secondly because of competition not only workers do not ask for higher wages but also are available as cheap workers without high wages .Thirdly production units need no investment expenses for specific training talents and skills not easily and they can choose needed workers needed easily in labor market. New clusters in different mature, grown or old stages make another form of cluster classification. Other kinds of cluster divisions include state-sponsored clusters, clusters dependent on large industries, industries dependent on trade organizations and free or natural clusters. Another category of cluster classification investigates clusters based on dependency point of view to the final consumption and clusters dependent on final production.

5. BENEFITS OF CREATING INDUSTRIAL CLUSTERS

There are many benefits in creating industrial clusters some of which are mentioned: Rondlet and Hertoug (1998) considered decreasing of trade costs , increasing of new skills, eliminating or reducing restrictions to market entry, increasing the learning process, achieving correlated economy and interest from obtaining joint or complementary patterns as the main incentive or factor for establishment of industrial clusters.

Minch (1999) refers to industrial clusters as the most effective way to achieve economic growth and presents interests obtaining from strategy of industrial cluster as following:

- Benefits for sustainable economic development

Industrial clusters help to public sector in order to control the optimal allocation of resources efficiently. In fact industrial clusters increase relationship of government with industrials therefore causes more appropriate use of available resources and helps to sustainable development.

- Benefits for public sector

With industrial clusters available organizations in the community can provide efficient services to larger groups.

- Benefits for establishment or initialization of the industry

Clusters can persuade private and governmental sectors to fulfill their demands by focusing on the industrial needs. Also available institutions in the clusters can help to better establishment of industries through making allocations , increasing bargaining power, better access to interests and having network information resources and special news.

- Benefits for investment in human resources

Clusters can encourage academic institutions and get their needed force in a more special or specialized form .

- Benefits for society

If there are some clusters then service and public institutions can provide better services.

Barkley & Henry (2002) argue that industry clusters in the process of industrial development provide four advantages for country. These advantages are as following:

- Existence of industrial clusters helps to more development and exploitation of available potentials in the industry

- Increasing ratio of the effect of accepting or formation of an institution in the industrial cluster is much more than the situation of establishment and operation of the institution alone. In other words the institution creates more indirect effects in the region.

- Studies show that when institutions are within the cluster their ability to employ workforce increases.

- Industrial clusters as compared to other organizations or institutions have more ability or tendency to collect and gather institutions and link them together.

6. SHORTCOMINGS OF INDUSTRIAL CLUSTERS

They fail to act properly if there is inappropriate copying of models without considering specific conditions of performed model in other countries.

- Adjustment of products according to customer demands may cause problems in the cluster interests.

7. INDUSTRIAL CLUSTERS IN IRAN

It is about two decades that cluster based industrial development considered as a new strategy that attracted attention of planners and policy makers in industrialized and developing countries. International organizations such as UNIDO, ILO and the World Bank as well as have implemented and supported numerous projects through the development of industrial clusters in different countries.

Nowadays in most countries of the world small and medium industries are working from different economic, social aspects and they provide industrial productions and services. Also in developing countries, small and medium industries are strategic factors for economic development, job creation and industrial competitiveness. Meanwhile our country with more than 90 percent of productive units is in the group of small and medium industries due to lack of development strategies based on existing industrial structures and release of small production units to their own works .These institutions failed to have a significant role in providing GDP and added value and they are suffering severe shortages in some of the following mentioned areas:

- Lack of necessary measures from different aspects of investment, production and market
- Lack of appropriate environments for growth of business from different aspects of law, legal and ...
- Lack of institutional and software infrastructures

- Production with old technology and lack of access to new technologies
- Lack of a coherent relationship with the banking and financial networks
- Lack of cooperative networks among institutions
- Lack of understanding of target markets

Industrial cluster is one of the successful patterns of small and medium industries which eliminates shortcomings of small and medium industries and increases different advantages of the small industries such as enhanced flexibility and diversity. Industrial cluster is a collection of manufacturing and service institutions in one field of industry which is formed by relying on coherent social capitals in different geographical areas in addition to supporting institutions and through the dense ties among institutions.

Small industries organization and industrial centers according to one of their missions with the aim of identifying and developing of industrial clusters of the country and by creating industrial clusters office in the second half of 2001 determined overall subjects of national development of industrial clusters as following :

General points of cluster development plan

- Culture and information making

Considering the fact that the rate of studies and experiences regarding the development of industrial clusters has very short background therefore in short-term programs special attention is paid to planning, culture building and providing experiences and theoretical knowledge to other nations in this field with special priority.

We can do some works like publishing of books and articles and providing practical guides for direct education of practitioners and public and private sectors as we discuss a bout culture and transferring of data. Obviously this matter must on one hand include the role of entrepreneurs in policy-making level and on the other hand should include those who benefit from industrial clusters. Available needs and defining of methods for culture and information making are among important applications.

- **Mapping of national industrial clusters**

In order to provide a comprehensive picture of available situation of existing clusters, their identification and defining the volume of activity required for the basic policy there is a need for the national mapping of industrial clusters .This map, which determine the geographical distribution and the overall profile of each cluster in different regions, is also a picture of available situation and planning tools.

- **Modeling**

In order to transfer experiences of leading countries and organizations and on the other hand for production of knowledge and indigenous pattern in the field of the development of industrial clusters, performing of projects for cluster development in cooperation with international organizations such as UNIDO, leading countries like Italy and experienced internal professionals are among agenda of the small industries organization and industrial center.

Among concerned activities in this section we can refer to preparation of performing framework of the project , identification of real and legal personalities for implementation of projects, cooperation with international organizations, education of public and private sector practitioners, defining of guidance and control system for projects, making coordination between relevant organizations and industrial cluster development agents and finally providing a document for the results and knowledge production .

The main responsibility of the organization in the field of small industries can be defined as development and facilitation of industrial clusters .Obviously in order to move in the context of this operation we require the definition of business process and roles of each key persons in performing the operation. Thus process design and work flow as well as structures in national and sub-national levels are considered as a prerequisite for organizational tasks .These structure and processes should be prepared in a way that avoid

controlling approach while provide maximum effectiveness in the preparation, facilitation, guidance and supervision of industrial cluster development .More over they should have proper amount of measures in the sections ,field work, law, national and sub-national level and they should cover private sectors, public ,state and private sectors .They also should have various scales of industrial clusters with the minimum interference and inconsistency with other sections or Law and country's current policies.

• **Lawful preparations**

In order to provide lawful guidance and support for industrial clusters we certainly need appropriate rules and regulations. Because in addition to focus on reducing legal barriers it is felt that there is a need for facilitating rules for development of small industries and industrial clusters. In many advanced countries there are appropriate legal frameworks which have the highest role in the correct orientation and value creating of food industries. Thus even assuming the lowest barriers in the existing laws and regulations it is expected that at least a supporting approach should be available for laws and regulations governing the country. Another basic element for industrial cluster development with non-command approach is institutionalization.

• **Development of institutions**

If we want to develop small industries and clusters it is necessary to provide them required services (including technological service, market and financial service and ...) .But based on the principles of the recent approaches most of these services often cannot be directly provided to the units and clusters. It is expected that this role to be applied properly by available institutions or institutions that will be created in the industrial cluster. Among these institutions we can refer to centers of business development services (BDS providers), research institutes and etc. Therefore, expanding, developing and strengthening of institutions and defining of its specific mechanisms are some of the agenda for industrial cluster development.

Function of small industries organization and Iran's small industrial cities in the form of each of the above mentioned subjects:

Culture making and informing :

Industrial clusters office for making culture making and informing has provided books and articles in the field of industrial clusters.

Mapping of national industrial clusters:

Performed activities for national mapping and identification of industrial clusters in the country has provided with the help of organizations which has lead to identification of industrial clusters in several different levels of country's provinces. Among most important points that these organizations consider as their development plan we can point to following issues :

- Tabriz industrial cluster of automobile spare parts
- Tabriz industrial cluster of leather
- Malayer industrial cluster of furniture
- Razan industrial clusters of rubber parts
- Laljin industrial cluster of Pottery
- Joibar industrial cluster of agricultural devices and equipments
- Tehran industrial cluster of leather
- Yazd industrial cluster of stone
- Yazd industrial cluster of textile
- Yazd industrial cluster of ceramic
- Bam industrial cluster of date
- Khuzestan industrial cluster of oil ,gas and petrochemical equipment

- Markazi province and industrial cluster of rail spare parts
- Hormozgan industry cluster of fishing

Modeling:

For modeling and developing of the identified industrial clusters both in the field of using internal experts and taking benefit from experiences of international organizations many important actions has been performed that we can be briefly refer to following points :

- Cooperation contract with the United Nations Industrial Development Organization (UNIDO) in the field of development:

Tehran industrial cluster of leather

Tabriz industrial cluster of automobile spare parts

Laljin industrial cluster of Pottery

- Cooperation contract with the Italian Industrial Development Organization (IPI) in the field of development:

Yazd industrial cluster of textile

Yazd industrial cluster of ceramic

- Cooperation contract with Italian Stone Association (IMM) in the field of development:

Isfahan industrial cluster of stone

-cooperation work contract with local experts in the field of development:

Khuzestan industrial cluster of oil, gas and petrochemical equipment

Malayer industrial cluster of furniture

This organization also for development of other identified industrial clusters such as Joibar agricultural industrial clusters prepares situations for cooperation with internal forces.

Lawful preparations:

Performed activities in the field of legal cases are mentioned:

- Special attention to the development of industrial clusters in Article 39 based on the fourth development plan
- Approving of the law of making small and medium industries competitive
- Approving of the development of industrial clusters adopted the following policies for industrial development in the country's center of government decision making

Shortcomings of industrial clusters in Iran

- One of the most fundamental problems is lack of cooperation culture and teamwork in the country. This problem makes accessibility and confidence among economic agents difficult.
- Lack of ecology studies and regional logistics in the country.
- Another problem is lack of necessary infrastructures for development of industrial clusters in the country.

8. INDUSTRIAL CLUSTERS IN OTHER COUNTRIES

Syncho area in Taiwan

In 1999 Taiwan was the third largest producer of IT hardware in the world after U.S. and Japan. IT products sector in 1990 grew by 20 percent annually and its growth in 1999 reached 21 billion dollars. Today IT sector in Taiwan includes institutions most of which began their work in the two past decades. Although these institutions are small in terms of size, they have international standards. Remarkable point is that even institutions which had a lot of growth through this section have continued their cooperation (and also competition) with other local institutions.

Main factor in the creation of such clusters in Taiwan is that there are skills and infrastructures which have been created in some two decades with public investment in education sector and also direct external investment from U.S. and Japan. Beginning of the industrial cluster work comes back to 1960 and 1970 when MNCs moved there their product line such as TV and user calculators in order to use low-skilled and cheap labor. Existence of such period in FDI in the electronic sector is important in order to make management and technical skills and marketing capabilities for development of PC industry. The most important works of Taiwan in order to follow the work of Silicate Valley path in creation of High-Tech industrial cluster is establishment of Synchu Science Park Founded in 1980 by the National Science Council. The main purpose of the establishment of the park was to attract foreign capital for research based institutions in Taiwan.

Also in 1980 the financial ministry of Taiwan provided an institutional framework for VC industry. The purpose of providing such framework was financing of products which they were based on research and development of public capital market. Based on this framework VC industry in Taiwan was responsible for providing consultation to professional investors, cooperation with some big U.S. banks to transfer funds and creation of managerial expertise and also it was responsible for sending some groups to Silican valley to become expert in management of VC institution. Moreover government was committed to provide 20 percent lower taxes for people and organizations that invest in strategic industries (technology based) with VC investment method.

Despite the creation of such a suitable environment for the growth of IT industry Taiwan was operating during 1980 decade as a producer with low added value in this industry. But gradually from 1990 Taiwan did not use advantage of cheap labor force and planned its growth strategy based on innovation and product quality. The main factor of this issue was that thousands of expert workforces came back from the U.S. after graduation and also working in Taiwan started as establishment of a company work or Start up for large institutions. These people had established more than 40 percent of 284 institutions in the Synchu park in 1999. Finally expanding of entrepreneurship sources and management by U.S. in Taiwan and communication of these institutions with available technology and market in the Silican valley had led Taiwan to achieve the border of technological production of IC and PC and their related devices in 1990s.

Cluster development strategy of Synchu

As mentioned development of available infrastructures in the country alone could not form a High-Tech industrial cluster in Taiwan. Taiwanese institutions knew that in order to be successful in global markets should have cooperation with Silican Valley as a complementary relationship. Main factor of success in the IT industry in Taiwan was that there was a kind of labor division between institution of these region and institutions of Silican Valley thus the institutions of Silican valley due to having skills and higher level of technology offered innovation and introduction of products and Taiwan institutions also began little by presence of low-skilled labor in Taiwan and the government support the gap between these two regions decreased to the extent that now Taiwanese institutions also perform innovative works. Actually activity of the government on one hand and development or transfer of VC institutions on the other hand are considered as the main factor of removing this gap. Government in 80th decade created organizations like ITRI supported by share research projects and also provided technical services to small and medium organizations which helped to a large extent to cooperation and mutual flow of technology and capital investment between Taiwan and the U.S. On the other hand the Chinese VC institutions Valley of silicate was working in offices in Taipei to control available investment opportunities and Taiwan VC institutions investment extended their investment in the Silican region. This new method of VC has led to creating a

new union network that connects the investors , entrepreneurs and large institutions together. The combination of these three factors in turn leads to creation of innovation and achieving global markets through rapid commercialization.

Textile and clothing industrial cluster in China

Formation of industrial clusters in China as an economy move wing of textile and clothing in China has an effective role in the industrial ability of this country and has managed the development and prosperity of this part of clusters of textile and clothing market in the world. Textile and clothing industry is one of the main China's economy columns which include about 6 / 9 percent of industrial production and 7 / 13 percent of the total force in 2001. Historically, the distribution of these industries is not accidental for example textile factories are located in three coastal cities of Shang hay, King Dow and Tyan. After establishment of new economy in China under the planned economy system the government had broadcast industries in most large cities and in the textile factory site selection the idea of industrial clusters was not considered. In most cases textile industry besides other kinds of industries is one of the major industries of relatively large cities. But in last two decades industrial clusters approach performed in China's industries and new clothing and textile clusters formed which make a very large percentage of local economies and in some cases they only make local industry. First generation of this cluster was created in the 70th and 80th decade when China for the first time opened its doors to the world. Based on the advantage of proximity and low cost labor many clothing and textile companies of Hong Kong invested in Pearl River Delta and a situation for textile appearance was formed. In this cluster, the new investors from Taiwan and many local institutions increased very fast. These clusters included Shang Jen, Dangyen and Hooman. Many institutions appeared with rapid development and collective or private ownership. Many of these institutions were clothing and textile clusters .Therefore clothing and textile economy developed quickly by orientation of industrial cluster formation in the Yangtze River Delta and it became too dynamic. Reasons for the rapid formation and development of industrial clusters of clothing and textile in this region are as following: First technological and investment barriers for entry to textile and clothing industry have been very low. Secondly most primary clusters began their activities with small institutions .They were farmers in small towns and villages who formed collections due to the nature of small urban and rural institutions established cooperation with each other before they be rival .They were also cooperate in all technical, financial and marketing fields and leading institutions were appropriate models for other institutions which were newly entered in these areas .These institutions were primary cores of industrial clusters in textile industry. Now most clusters are distributed in two Pearl River Delta and Yang Tese regions . The clusters are located in a developed region in China with the best information and communication infrastructures in the coastal area. Another significant issue is that these clusters are located along highways and near the ports in major cities especially Hong Kong and Shanghai. National Advisory textile industry has identified three types of clusters in China:

(1). Textile based industry which is mostly located in medium-scale cities in five provinces in China which form much of the added value of China textile and clothing. They include five provinces in addition to coastal provinces.

(2). cities with special activity features work in certain textile and textile field .

(3). small towns are characterized by specific types of activity in the textile and clothing products. These cities were pioneers of textile and clothing industrial cluster in China and all of them are concentrated in coastal provinces (Shanghai, King Dow and Tian Jean).

Now the structure of textile and clothing industry in China is determined based on the two following factors. One factor is corporation groups created in large cities with high-capacity in marketing and developing products that often work in local or global supply chains and second factor is some clusters established with a number of other small companies in mall cities which have scale production with rapid growth characteristics .So industrial cluster is one of the factors for development of textile and clothing industry in China which has proven its effects .

Science and technology industrial clusters in Zhangvankun of China

Zhangvankun is a large region of science and technology in Shanghai of China. Development in this region has been very fast (with 30 percent annual economic growth) .This technology corridor established in 1980 and its growth until 1990 was slow but then started a rapid growth. In 1999 trade volume in this region was about 8 billion dollars. 68% of industries in this region include electronic information industry. Optics industry, environmental protection industries and new energy make about 20 percent of the activities of this cluster.

Meaningful support and encouragement of government, big market, abundant and inexpensive human resources were too effective in development of this science and technology region. Chinese government's new plan has predicated 20 billion dollars of investment in this region in 1999. This region seeks to compete seriously with Hysnchayu in Taiwan, Singapore's technology park and Bangalore's information technology corridor in India .This region in China is known as region of superior knowledge of science and technology. Main scientific and technological advantages of this region include 68 big academic centers and colleges, 213 scientific research institutions, several large science and technology parks and developing human resources. Relative weaknesses of this region are in achieving wide investment risk and possible lack of diversity in industries and technology services.

Networks of large and small companies in electronics industry of South Korea

Korean «Chaebol» is considered as a stimulus for technical and industrial development of the country. Four most important Korean Chaebols including Daewoo, Samsung, Hyundai and Lucky Gold star are only part of the largest global electronics manufacturers but also are classified among the 50 major companies in the world. Chaebols performed their development through expansion and compete with the goal of being greater than each other and through product and regional diversification.

Based on recent evidence small and medium sized companies are achieving advantages in industrial economy of Korea . Korean SMEs are in close relationships with large companies and are actively supported by them. Large companies take advantage of flexibility particularly in the form of labor costs, specialized skills and knowledge which offers by small companies while SMEs can be developed based on technical and financial support of large companies.

Korea's industrial development policy is known which is applied in terms of the role of active government involvement in shaping industry, trade, investment and policies of production companies.

Small companies in Korea did not have a separate growth from each other or large companies. SME development is related to the growth of subcontractors. Based on Cho results 80 percent of all small companies produce more than 80 percent of their productions supported by subcontractors. Subcontractors are found in abundance in all cases.

In current development situations the economy of Korea has set up in a way that large companies that left their production to small companies due to pressures in terms of their labor concentrate according to technical advantages resulting from vertical production network. Large companies have focused on the technical characteristics of production based on the design and development of the product while the production of standard goods provides through series of subcontractors work in the form of other new companies and if there is transfer of technology from small companies to large companies it will be controlled by government.

. In the lowest hierarchy steps of vertical production, i.e. relations with smaller companies, large companies were attempting to reduce and minimize production costs. At the highest point of hierarchy steps is relationships with subcontractors that are technically considered as being strategic .Therefore large companies with other supportive institutions attempted to generate innovative entries for production. In addition most large companies have forces that are responsible for contract administration activities which include appraisal, detailed design, upgrade technology, delivery terms and even salaries set by the contractor .To achieve such goals large companies in order to help small companies have expensive cars

along with initial materials, spare parts, financial help and even sent technicians to control the quality. Also large companies attract technical and strategic of SME. This makes the negotiations to determine the features and standards, the use of public facilities, bilateral research and development of, skilled investment training, exports and foreign investment with the mutual cooperative help.

In addition to efforts performed actively in the field of SME promotion the Korean government seeks to establish the relationship between large companies and SMEs. This relationship will be considered for those who agree with cost reduction (rather than changes in the technical strategy). Among the promoted policies the condition of special activities or business domains are just for SME and this issue in turn increases the ratio of commercial banks lending to SME.

Industrial cluster of superior technology in Inkhun city of Korea

Korean government in 2003 established Inkhun Economic Zone (IFEZ) as an active technological industry clusters with High-tech industries in order to achieve some goals of knowledge-based economy in Korea. This region is located in thirty kilometers West of Seoul. This region is in some kind of. Competition with similar technology regions such as MSC which has commissioned its approach is to attract and develop industries and services with superior technology. The region's area is about 1000 square km which is divided in three large regions of Sangdu (Smart city), Yang van and Cheungna and for each of them has separate goals and programs which have been designed with a total investment of 20 billion dollars in the early 2020. Through planning the development in this area has been very rapid so that in the UNDP ranking of science and technology centers in the world has thirty-fifth ranks.

Multimedia industrial cluster in Malaysia

Malaysia's multimedia super corridor perhaps is the most interesting pattern of science and technology cluster for developing countries. In 1996 when the idea of performing this corridor initiated in Malaysia this corridor was the focus point of the Malaysian government to services and industries with superior technology. Volume of investments in this corridor up to its completed step is predicted 20 billion dollars. Changing of Malaysia development approach from industrial economy to knowledge-based economy implies special look at this corridor. The corridor with area of 750 square kilometers is started from Kuala Lumpur city center and continues to the new Kuala Lumpur's international airport.

New government electronic city of Putrajaya and Saybrjaya has been established for industries and services with superior technology. This corridor has been designed by using all experiences of science and technology cluster especially Silicon. The effective presence of government in providing infrastructures and its management are among typical characteristics of this region. Government has tried to compensate for the weakness of human resources, scientific research center's production ability and educational weakness through attractive environment of corridor for foreign investors. This corridor in the course of its activity has provided areas suitable for job creation.

In 2005 a number of 1208 Knowledge-based companies had activities in this corridor. Of total amount of available institutions 2005, 67 companies were active in this corridor at international standard level. This corridor targeted to reach 250 international standard companies in its developmental goal.

Advanced industrial technology networks in Bangalore city of India

Bangalore city which once was quiet and suitable city for retirees is today one of the large cities and developing cities in India. This city has the same value like the holy city for the industries that benefit from advanced technology and in future will be a model city and a rival for Silicon Valley in India. In this city the space program is developing. This city by using advanced technology with an advanced computer programs produces military missiles and provides information technology equipment. Many of these products are introduced worldwide. In fact this city is a center for science and engineering in India.

This center has developed for research, education and production. Many successes in the advanced technology in this city is formed because of connections between small medium and large institutions that includes connections including technological industry with local specialized research, education and institutions that lead to more education at higher levels. This city should be considered more than a single product cluster which has compressed and connected networks or between engineering or high tech, electronics networks, telecommunications, computers, machinery and defense sectors and local institutions. So the first advantage of established industries of Bangalore is existence of professionals as production source and idea flows of producers, workers and engineers.

Engineering and related electronic industries of Bangalore are the main industries of this city. Karnataka's capital Bangalore is the main center of military and space industries. This city is an important city in the computer industry (software and hardware). The largest telecommunication industries have been established in Bangalore. This city is one of the important centers for major machinery manufacturers in India. Recently the presence of skilled personnel and low paid has internationally attracted a range of international companies to Bangalore. This phenomenon particularly in providing IT (Information Technology) and computer software lead to attraction of many international companies that they had established their equipment in the city or were working jointly with Hindi partners. These groups of companies were from TNCs including Philips, IBM, British Aerospace, Texas Instruments, BM, Siemens, Hewlet Packard. The majority of these companies were located in Bangalore in order to benefit most from the emergence of local markets in India and they had selected the city of Bangalore for the origin of their exports. Most groups in the TNCs were relied on scientists and professionals in Bangalore in order to ensure their global software needs. Having specialized and relatively inexpensive forces and the staffs were the main reasons for Bangalore competitiveness compared to international level in which information sector would play an important role. Engineering power in Bangalore compared to Silicon Valley was cheaper. They also established the process of technical innovation in the community and opened the way for the use of new technology for companies including electronic, computer factories, metalworking operations with computer machines, CNC (Computer Numerical Controlled), CAD (Computer Aided Design),

knitting factory equipped with new machinery and factories to produce clothing. One remarkable features of the industrial network particularly in Bangalore city was existence of technical institutes. Some of these institutions were run as private; however, most of them were created by central and state government. Some of these organizations were presented exclusively supports in each particular sector while other institutions were provided public services to manufacturers. Perhaps most important point was attending of a large number of institutions as centers of education and training in Bangalore. Among unions related to SMEs in Bangalore we can refer to (KASSIA) means Industries Association, Karnataka Small Scale, (CEIK) means Consortium Electronic of KarNataka and (PIA) means Peenya Industries Association.

Among the objectives of these institutions is providing consultation on technical and business field and introducing members to foreign suppliers and markets, publishing weekly journals and encouraging members to form a consortium to develop areas of cooperation.

Other trade organs called RLC (Rotary Lions Club) had also presented which their goals includes collecting of craftsmen in different industries and providing important conferences related to economic relations between the members.

Banaglore with several other institutions which only provides public services to producers the range of its services also includes tech industry. For example Standards Institute of India is a governmental organ as a central provider of the equipment needed for certification ISO and as an encouraging factor of India industries which has gained International ISO 9000, ISO 9001 and ISO 9002 certificate.

The technical consultancy services organization of karnatak (TECSOK) is about technical consultation and provides justified plans for the small industries in Banaglore.

Large parts of these institutions are related to technical training and provide services to manufacturers. Small Industries Service Industries in (SISI) in Banaglore have an important role in focused engineering workshops in the small industrial cities. These institutions provided trainings for the staff and also provided business and technical services for local SMEs. The Foreman Training Institute (FTI) and The Toolroom

and Training Institute were working in relation to arrange training programs and courses and skills for technicians.

There were other private institutions such as Nethur Technical Training Foundation that performed 4-year construction courses about making tools and templates along with programming related to CAD and SNC which eventually leads to graduation. Finally the Indian Institute of Science, University of Economic Sciences and local school Indian Institute of Technology, Indian Institute of Technology (IIT) all provided the specialized training for engineers and other members and encouraged research and development activities for companies in Banaglore.

Knitting cluster in Tiruppur of India

Knitting sector is known as a part of the Indian sub-region sector. Clothes with synthetic fibers are produced mainly in Dehli and Bombay while knitting wool industry has been established in almost the majority of parts of regions of Ludhiana (Gawthore 1990) and knitting cotton industry has been under the control of smaller companies. Center of this small industry town is called Trippur industry with approximately 235 000 population in the southern state of Tamil Nadu and the large city Calcutta.

Tiruppur despite its small size which is relatively far from the eyes was introduced as one of the export centers of cotton knit in India and produced clothing are sold in big European stores.

Tiruppur is known as a successful town recall that its growth was dependent on cotton textile industry. Although manufacturers of Tiruppur force had advantage of low cost human forces, however, competition in general of Tiruppur in textile industry was related to local traditions and organization of production systems based on regional cluster that by itself is dependent on production of institutions in the corporate group as a flexible and three-dimensional issue. This issue in recent years led to presentation of signs of product development and technological advances. Tiruppur is an ideal city for textile which is located in the heart of the cotton production area and has a long history related to preparation of cotton as raw material and a center for hand weaving or business trade .In this city cotton buying and selling is done traditionally to determine the price of cotton as a raw material Tamil Nado state. Large number of spinning and weaving industries along with hundreds of small companies that are clothing producers are located in this city. They provided many willow machines and workshops for spinning yarn weaving units, dyeing and fabric paint to give dyed clothing to clothing weavers and for designing of women's clothing to perform special designs on it. In this place components manufacturers, knitting, the buttons instruments, and marking of instruments placed along with service providers. Although the city of Tiruppur apparently seems as a small town but has a small manufacturing plant that has the benefit of industrial clusters.

In Tiruppur cluster center there are garment and cotton manufacturers which include three different types as following:

- (1). Producer who works for export.
- (2). Businessmen who work in trade field.
- (3). Non-exporter producers.

Each of these parts can be formed by small, medium and large producers, however, producers and businessmen who do export work are doing formal or informal activities and major corporations are doing to their horizontal and vertical relationships close to each other. The third group, i.e. the producers who do not export, is considered as contractors which act for the first two categories and do their sales in local markets. These units are very small and produce much simpler items (e.g., vest) which actually their cutting and sewing and painting is hard.

In Tiruppur there are other broad activities related to the textile industry .These units provide knitting parts both in the former local level and subsequent related production parts and includes companies which act in spinning yarn , color dress, dyeing dress, shiny making ,tailoring and printing. Ancillary units and other sectors such as buttons producer , marking and packing collar with the other users are provided.

Three types of supportive institutions which were used for the protection of industrial weavers are as following:

The first institution was the institution that gained its support from government and received the name of the AEPC that means Apparel Export Promotion Council.

The second type of the most important of these institutions was (SIHMA) with the abbreviation South Indian Hosiery Manufacturers' Association .The latest and the most active institution name is abbreviation (TEA)and its the full name is Tiruppur Exporters Association.

The third institution is (SITRA) with full name of South Indian Textiles Research Association.

Activities of these institutions are described briefly below:

APEC institute was working both as an controller and advertiser in knitting industry. AEPC was established in 1987 by the government and its responsibility was increasing of growth and export and providing consulting services for buyers and exporters and the government.

AEPC through determination and offering prices for companies received special power and influences in the cluster. AEPC also was responsible for providing the costs related to meetings between buyers and sellers. Also data collection at the local level and external marketing activities and other foreign countries should be done in which India did not enjoy a fixed contribution.

Local association of Tirrppur exporter or in other words (TEA) established in 1990 with goals in line with AEPC that were the activities of advertising which was formed especially related to collection of business information and search for progression of new markets such as markets which had formed after destruction of racist regime of South Africa. The main goal of providing TEA Association was providing exporters who were working in knitting activities and production units were deployed in Tirrppur. The Institute for the needs of exporters in general and their production units were established in Tirrppur. This institute acts for providing exporters needs in Tirrppur and generally provides facilities for all parts of the town. These facilities include providing terminal containers , sewage network and a telephone network with 400 numbers.

The third institution that can play a special role in Tirrppur is SITRA institution. Both AEPC and SITRA institutes are working for the preparation of laboratories for research , development , testing (CUM) and education in Tirrppur. This creates two input factors that are sensitive to clusters and industries alone cannot provide financial issues.

North clusters land Austria

Since 1998 the north area of Austria has seriously perused technical policy, cluster-based economic policies based on strategic plan in 2000. Purpose of it is to achieve continuous improvement in the power of local competition.

The main aspects of this program are systematically expanding of the technical and economic powers in areas of the north of Austria which aims to improve the innovation capacity of companies, particularly through the network cooperation. In five recent years 8 following clusters have been created:

- (1). Car Cluster
- (2). Automotive technology and transport cluster
- (3). Plastic cluster
- (4). Timber cluster
- (5). Environment energy cluster
- (6). Food cluster
- (7). Sanitary materials cluster
- (8). Mechatronics Cluster

Technical and marketing company of north Austria (TMG) is in charge of the first four clusters as well as health materials and Mechatronics cluster. Normally environmental energy cluster is created through

interconnected relation of energy savings institution in Austria north with this section and Chamber of Commerce also has organized activities in food clusters.

Among the bulk of future funding from the north of the Austrian a large number of financial needs has ensured though the clusters gradually have increased finance level supply through participation by partner agencies in helping to provide related services. Donations include membership fee in amount of 255 Euro for small units (less than 9 people), 510 Euro fee for small and medium units and 1020 Euro for large units that these amounts have been offered to participate in the operations and other expenses related to offered services. In the medium term the objective of all clusters is provide at least 45 percent of financial need that is specified to the economic benefits in proportion to their performance analysis to provide the remaining 55 percent fee related to general economic effects (to create an interest that is beyond the cluster level and surface finds along the region's economy for example marketing and education,...) financed by public funds .

Currently about 1646 companies, R & D centers and educational institutions in the network have 8 cooperative domestic. This is evident of the fact that the local business community recognizes the need for close cooperation between companies with a range of coordinated global approaches. Today regional competitive will not assess through individual power of companies but with a wide range of industry innovations and its complementary branches as what is emerging in new clusters in north of Austria. Team work (Group) is the key to success that not only gives power to but also includes the whole structure of the economy in a wide level and constant manner. North of Austria is now the leader of economy network and no other stable region with such a system exist.

85% of the 1646 cluster member companies are small and medium institutions and around 28% of them are from Austria and therefore have invigorated international cooperation. Local government of the north of the Austrian provides any innovation, joint projects within the emerging cluster and using at least three companies, one of which includes Europe Union classified as small and medium institutions to finance the project. This Funding includes 25% of personnel costs, outside consulting services, travel and other expenses .Maximum amount of funding is 37,000 Euros for each project. After 5-years of cluster's survival maximum amount of granting is reduced 27,750 Euros for each collaborative project that has not changed up to 25%.

Italian footwear industrial clusters

In the early sixties the Italian shoe industry was in Europe after France, Great Britain and Germany in a positive fourth place. At that time production was mainly focused on the domestic market and shoe manufacturing sector overshadowed a positive small-scale institutions and shoe makers with hands. During three successive decade geography of the footwear industry in Europe changed greatly due to the severe reduction of activity in this industry in France, England and Germany and dramatic growth in the shoe manufacturing sector in Italy also changed greatly.

Competitive factors that led to the success of the Italian shoe industry have been looking for a specific evolutionary pattern. In the first stage of development of development this industry during 60th decade took many advantages from labor cost compared to other European rivals. Subsequently high amount of specialized system of shoe production system in Italy was the main source of comparative advantages. This system was based on two assumptions: first one is division of the production cycle between several industrial institutions each of which specialized in particular producing stages and second is existence of a very developed network from related companies that produce reverse products which were responsible for raw components for footwear industry. Organizing of available production between manufacturers and suppliers of several specialized region, the possibility of high flexibility and matching of industry with market changes created for the footwear industry. Italian shoes manufacturing companies in the international market were known as reliable companies that were able to quickly build orders in different shoe sizes and make ready for Italian companies that could increase their share of exports continuously.

During the 80's other European countries like Spain, Portugal and former Yugoslavia former and other East Asian countries that recently were during the industrialization like Taiwan, South Korea and other developing countries like Brazil, India and Chinese competed in the International market and increased its

exports greatly. Italian shoe production system for facing with this growing competition used its superiority in the fields of design, shape and mode of shoes aimed at reducing price. Italy tried to increase its export sector. The competition was gradually increasing because the new producers used cheaper labor than England. Furthermore, consumer tastes from traditional leather shoes changed in to production of artificial athletic shoe in which countries like Korea, Taiwan, Hong Kong expertise have been specialized.

After 30 years of continued growth the Italian shoe industry now has entered a difficult stage. Most obvious features of the Italian shoe industry are:

Number of manufacturers high.

Average firm size is small. Concentration place is visible only in some specialized area.

In 1993 the total number of companies was more than 8100 companies and total amount of workforce was 18,000 people. With regard to the industries that link backward to the manufacturing sector shoes in 1993 the system of producing shoes in Italy included 2265 provider of accessories (36,620 employees), 2173 tanners (23,000 employees) and 315 machinery manufacturer(5000 workers).

Shoe manufacturing sector has a lower concentration level: only 7 / 0 percent of companies have more than 100 employee and companies have labor forces which is less than 50 8 / 74 percent of the total work load in this section. A significant number of companies have workforces less than 10 people who includes 72 percent of total footwear production sector companies and 32 percent of total labor force. Two main clusters are in Italy shoes include: Markeh and Berneta

Markeh

Markeh shoe industry was created in 1920. In this year a group of people in Monte Granaro were a major regional center who worked in shoe factories and had migrated to the north and then returned to their villages and the first industrial enterprises were established.

During the 70s the regional job growth rate in manufacturing sector of Markeh was 91% while average amount of national growth rate of employment in this sector during this period was 38%. From 1951 to 1993 the total share of labor to total labor force in Markeh and in shoe production increased from 4% to 26% .

In 1989 shoe manufacturing industry in textile and leather industry authorized 35% of added value and 47% the total employment in Markeh.

The largest collection of shoe companies and manufacturers of shoe components and accessories is located in Markeh of Italy. In 1993 amount of 2410 shoe manufacturing company with 25,437 employees and 772 manufacturers of shoe components with 9600 employee were in this city. Value of production in these countries in 1993 was 2720 millions of Lear which was equal to 24% of total production value of manufacturing sector in Italy shoes industry in this year. Shoe exports in this area covers 52% of the total production in the region and 18% of total footwear exports of Italy.

Berneta:

Origins of the shoe industry in Berneta comes back to time of establishment of Kalzatorifuchoveltan Company in 1898. In 1904 the number of employees was 1000 people with production capacity of 1000 pairs of shoes per day. This company was the first shoe production in Italy. Coincides with the beginning of the twentieth century many employees of Veltan Company established a new independent work in Astra and other neighboring villages and this event is the emergence of regional production of shoes in Berneta. Today 85% of shoes produced in the region are women's shoes that are made for medium and high sector of the market. In 1989 total number of workers in the shoe manufacturing sector was 10,000 persons. In 1993 a number of 285 industrial shoes institutions were in this area despite the number of 132 firms which were handmade companies and amount of 365 companies were shoe components in this area. 84 services companies specialized in the field of preparation and production of shoe models were also in this region as

well as 68 trading companies. Total value of shoe production in this area is about 560 billion Lira equals with 4 / 5% of the total production of Italy. Mentioned regions are going strongly towards export orientation.

Software cluster in Ireland

Ireland is among countries which have entered software and IT services in a specialized manner and has used increasing world demand growth in this area. Although Ireland is among players of IT scene in world markets but due to the rapid growth which has experienced in this country it can be expected to increase in the future. More than 50 percent of software institutions have established in this country in 1990 and annual growth rate of software exports during 2001-2000 is 55 percent.

Important point is that software production needs more human resources than other factors which have caused the country's development in software field despite low access to investment so that total amount of the Irish country and computer in 2000 was 9.3 billion dollars .

Ireland's relative advantages:

In Ireland professional labor is considered as a relative advantage and progress factor towards creating software cluster. In Ireland 26 percent of labor forces have college education which equals the average of OECD countries. Existence of the relative frequency of such human resources led this country to use increasing of world demand in the field of software and computer services and achieve success in this area.

Access to world markets

Ireland adopted some methods in order to use the growing global demand in the field of software and computer applications that this section explains some of them:

A: Use of MNCs: MNCs for available institutions are considered as a way of achieving to the market for Ireland. Most successful Irish institutions started their work with contractors of one of the local branch of MNC in the IT field and they have used this network to access foreign markets and achieving reputation.

B: Migration of workforces to abroad and their returning:

During the 1980 surplus of specialized labor supply led to enough motivation for migration of this group from Ireland to countries like U.S. and UK. Although this was considered as loss of human resources for this country; there are also benefits in this immigration so that these professionals can link to some foreign markets which lead to technical findings and new management in the country.

Government actions:

Government activities are more famous in connection between domestic institutions and global market in Ireland . One of the government's actions in Ireland is designing a development strategy in such a way that the Irish firms directly or indirectly through the MNC connect to the global trade network. Other operations of the government in the late 1950 was program of "industrialization by attracting foreign capital" in order to have economic development. The government program using tools such as tax and investment incentives tried to focus on successful High-Tech institutions focused and provide a proper environment of investment in Ireland.

Other governmental supports is establishment of Enterprise Ireland center which is using various tools such as giving R & D awards, tax cuts for exporters, providing consulting marketing and financial supports helps to continue enterprise activities . The Institute also helps domestic institutions in order to be connected to the foreign institutions.

High -tech cluster in Cambridge

Cambridge cluster is formed from a range of institutions, university links and VC local industries that support entrepreneurs in knowledge-based industries. At the end of 1999 the number of High-Tech enterprise working in the region was 959 and 31,000 people were working in the institutions. Thus Cambridge area is almost the best one among all the information technology (IT) clusters. However the University of Cambridge had played an important role in the successful formation of this cluster.

Notable point about institutions working in the Cambridge area is that the size of these institutions is relatively small. According to surveys conducted in 1998 just four large firms (with more than 500 workforce), i.e. 1.1 percent of total enterprises, are working in this region. The presence of a large number of services and consulting firms partly explain this problem.

Wireless communication of Sweden and Finland

Scandinavian success in the field of wireless communication is evaluated as a cluster. This region includes two big institutions with wireless equipment in the region (Nokia and Ericsson) that each one holds more than 30 percent of world market. Heavy use of wireless equipment in the region is a main factor for raising the competitive capacity. For example Telia company (Telia) has established a service and software network in California based on domestic market of Sweden with a global scale. For the success of the Scandinavian cluster we can name a few main factors that exist in almost all clusters. Firstly access to a large and growing demand (Wireless market in Europe, 1990s) Second focus on new technology (ICT) capabilities and ultimately the presence of a large number of English-speaking labor forces and specialists in the Scandinavian region which had a major role in the formation of this cluster.

As mentioned the success of Scandinavian cluster have been based on two large firms of Nokia and Ericsson. Nokia firm operates in Finland and in 1998 had about 21 thousand labor forces (ICT). For this institution about 14 thousand people were working as contractors. In the first decade of 2001 revenues of Nokia Company were 8.01 billion Euros. Ericsson Company also works in Stockholm of that in this city that only has 200 Start ups. The Company in 2000 with about 90,000 work forces has worked as Joint venture.

Science and technology cluster of Silicon Valley in America

Silicon Valley is considered as the father of Science and Technology clusters. This cluster is the most experienced cluster in science and technology cluster which is located in California. The initial core of science and technology performed by creation of a collection of buildings and laboratory equipment for commercialization purposes for some scientific achievements of Stanford University in the early 50's and later called the Stanford Research Park. In this decade, almost the full range of companies with superior technology deployed in the Zhang region (2003). Currently about 500 large companies with superior technology and with international standards is presented in this area. This region is the largest investment absorber in the world in the ten-year period (2001 - 1992 71) has attracted more than one billion dollars which is more than seventy percent of these funds at four areas of hardware, communications and business and consumer services, and semiconductors.

Brazilian footwear cluster of Sinos Valley

Small city of Sinos Valley that is located in the RioGrande de sul is center of shoe industry export. This area small which is a Super cluster in production of shoes of (Super Cluster) is fully dependent on activities related to shoe making and leather making and nearly 1,800 different companies and 150,000 people were working in Sinos Valley that covers more than one billion dollars a year in America shoe industry. (1995 Schmitz).

Schmitz considers 3 factors for economic success of Sinos Valley including:

First, the former relationship of manufacturers with shoe machinery of local suppliers and service productions. Second communication of subsequent production between producers and buyers, especially export factors. Third strategy involved in supporting institutions to facilitate capacity building cluster to added value of product markets.

Despite intense local competition, however, producers are working with a loan to get a machine working in the informal collaboration and distribution information. There are documents showing that shoe manufacturers actively and regularly are in connection with other manufacturers .What is important is that there is a horizontal cooperation between the Community and regional institutions of Sinos Valley cluster .

Mexican shoe clusters of Leon and Guakajara

Mexican shoe industry has interesting conflict with Sinos Valley shoe cluster. Shoe manufacturing in Mexico like Brazil is in a focused manner. There are three special clusters including Leon that is 51% of Mexican companies which produces men and childish shoes and Guadalajara that produces 22% of Mexican shoe companies with synthetic materials. Mexican companies are primarily small family companies which run by traditional craftsmanship. It is estimated that approximately 2,700 companies with 70,000 employees in Leon 1100 manufacturer with 25,000 personnel are serving in Guadalajara (Karnd Rbellotti 1995b). Small companies listed in both places are in large numbers; however, larger companies have more share point in relation to production, value added and employment. Like, Sinos Valley cluster Guadalajara and Leon both have a series of institutions that can enable financial and technical support for management. This collection includes some units that can give loans and also includes technical centers that can provide specialized service and support. Comara national business associations had no influence to provide support for industries .Governmental aids were limited.

Despite a long history and extension of their shoe industries both clusters were acting in a weak manner with their former links with industry part producers which technically were developed to offer machines in the shoe manufacturing .

Unlike Sinos Valley, Guadalajara and Leon do not cover producers who manufacture machinery works .

Marketing and commercialization in the Mexican shoe clusters is also too weak to support a GDP domestic market and removes the quality of development cooperation with optimizing subsequent communications from the growth rate of return which is related to competitive prices . Like previous communications recent developments in domestic and export markets led to qualitative improvements in subsequent communications. Although both Mexican shoe clusters like Sinos Valley have important presence in supporting local institutions, corporations have tried to induce them to cooperate in clusters and increase communication with former suppliers and develop facility services and financial issues. . Of other innovations of Camara Del Calzado we can refer to suggestion of establishment of an industrial park shoe producers and those who make its components .This company had also made some connections in order to have link with shoe companies of Italy in BRENTA in order to make the risk of connection and encourage cooperation with local producers in Guadalajara. Another innovation of Guadalajara Camara (by using UNIDO method) was encouraging cooperation between the companies called "agrupamentos industrials". Agrupamentas gathered members of companies as the free members of a group. The group member of companies must agree with formation of factory that other members were visited it. This issue removed suspicion and distrust that is common among the competitors.. Innovative processes with the aim of facilitating dialogue between companies and raising awareness of related marketing, technical, systematic process of knowledge exchange and discussion on common problems and technical issues occurred between members.

One of the Industry Ministry plans was to encourage horizontal cooperation called *empresas intrgradoras*. Shoe manufacturers had established companies for the purchase or sale of items and in a continuous or input or output method in some form of horizontal cooperation.

Credit institutions (CUS) of shoe manufacturing was created in both clusters causing easier access and cheaper access to get loans from the banking sector, especially SMEs, and also encourage the collective

purchase of inputs by members of the CU. Credit institutions provide widely the requirements of SME members in their primary transaction in the SME market as credit requirement.

9. CONCLUSION

Studying the industrial clusters in the selected countries, it was concluded that the two previously suggested hypotheses are confirmed, since governments have a key role in the growth and progress of industrial clusters in a number of different ways. Another point to be mentioned is that the stronger the posterior and anterior relations between the companies, the stronger the industrial clusters will be.

Yet, another point is that, by studying the industrial clusters in other countries the actions that lead to their success and industrial bunch growth can be described as follows, and they can be utilized in Iran in proportion to the condition of industrial clusters and macro-policies:

- Establishing and developing the hardware and software infrastructures through state and overseas investments
- Establishing knowledge park in order to attract overseas investment including financial, technical, and specialized investments
- Proffering consultations and financial, administrative, managerial, technical, and technological services and also, tax breaks by government for industrial bunch investors
- Attracting overseas investments through offering tax motives etc., especially in connection with potential industrial clusters
- Establishing and formulating regulations related to production standards, and guaranteeing high quality and constant observation of them
- Establishing channels through which customers can give their suggestions and ideas to engineers and designers
- Building research and development laboratories, presenting the information related the production of commodities to the producers.
- Cooperating in establishment of an advanced system of the providers of commodities and services required for industrial clusters
- Organizing regional, national, and international commercial exhibitions, forming export consortium, reducing export taxes, offering marketing and advertising activities consultations
- Designing developmental strategies in order to connect the agencies to the international financial network to gain access to the big and growing demand of the produced commodities.
- Granting awards for establishing R&D units and underwriting any innovation and initiative in industrial clusters
- Establishing credit institutions in order to cover the cost of financial needs of producers with lower interest and easier access
- Dispatching teams and individuals related to clusters to developed industrial clusters regions of the world to get the latest developments and innovations on the field of industrial clusters
- Adopting and applying growth strategy based on promoting innovation and establishing the quality of the commodities
- Following the strategy of decentralization of production phases through contract in order to reduce the costs, increase flexibility, and escalate the extent of specialization.

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