In 1991, with the introduction of liberalization in India, the economy transferred from controlled to the liberalized one. This change provided an opportunity to multinational companies to enter into the Indian market. The entrance of these firms forced players in the domestic market to adopt various strategies to face competition and enhance their competitiveness.

Clusters are found as an important driver of competitiveness (Porter, 1990; Bail, 2008 and Ferreira and Alberto, 2009). Various authors (Porter, 1990; Schwab and Porter, 2003; Zinnes et al, 2001; Zanakis and Becerra- Fernandes, 2005; Flanagan et al, 2005) have defined competitiveness at the country, firm and industry level. At county level, competitiveness can be defined as the performance of the country in the international market. The objective of enhancing the nation’s competitiveness is to improve the growth of the country, standard of living of its residents and human resource development. At firm level, competitiveness is defined as improving the productivity of the firm so that it can easily survive and grow in the industry. At the industry level, competitiveness can be defined as the extent to which a specific sector:

1. Satisfies the demands of the customers from an efficient package of product and services.
2. Satisfies the need of workers in terms of wages, employment, training etc.
3. Provides opportunities for growth and ensures attractive return on investment.

Schwanitz et al (2002) defines competitiveness as the abilities of individual firms, clusters and even countries to assert themselves in the domestic and international market.
Clusters help in improving the competitiveness of the firms located therein. The process of clustering contributes to the competitiveness and growth of the participating firms (Basant, 2006). Porter (2000) defined that companies located in clusters tend to be more competitive, export more and generally are involved more in international trade. The author explained that firms within the cluster are more productive than firms outside it. If the competitiveness of the cluster is improved, it will lead to improvement in the competitiveness of the firms located within it. The present study proposed a model to improve the competitiveness of sports goods cluster of Jalandhar. Before developing a model, SWOT analysis is applied to analyze the competitiveness of the sports goods cluster of Jalandhar.

9.1 SWOT Analysis of the Cluster

SWOT analysis indicates a complete listing of strengths, weaknesses, opportunities and threats of the cluster. SWOT analysis has been made to understand the capabilities of cluster to face the future challenge. The stakeholders were asked about their perception of strengths and weaknesses of the cluster. They were further asked to share information about the missed opportunities in the past as well as any anticipated threats in the future. Based on the above information, the SWOT analysis is undertaken as under:

1. Strengths of the Cluster

- The entrepreneurs believe in relationship marketing. Many firms have developed a group of loyal customers who approach them for their demand.
- High skilled manufacturing. Even owner have complete competence in the business.
- Standardized traditional technology is utilized with minimum use of machinery.
• Easy availability of inputs like wood, leather, rubber, fabrics, cotton, feather etc.
• Availability of subcontracts, household workers and job workers leading to easy execution of small and large orders.
• Good road and rail connectivity with all states and the country ensuring easy transportation of raw material and finished products. Further the presence of airport of Amritsar (60 kms) ensures import and export from abroad.

2. Weaknesses of the Cluster
• The firms in the cluster are reluctant in cooperating with the competitors.
• Low consciousness of the producers towards brand building as most of the firms produce for brand of other manufacturers.
• Low willingness of the entrepreneurs to adopt new technology or new methods of production.
• Non availability of Kashmir Willow due to its restriction on sale out of Kashmir.
• Absence of training institutes for the development of manpower.
• Problem of availability of manpower.
• Absence of Business Development Service providers to provide necessary support services.
• Non reliance of entrepreneurs on the expertise of professional consultants for obtaining their expert advice.

3. Opportunities for the Cluster
• High demand of exports due to increase in the interest of people in health consciousness and leisure activities.
• Even in the domestic market, the sports culture is growing, leading to increase in the demand for health equipments, sport shoes and sportswear.
• Good potential for improvement of productivity with the use of new and improved technology.
• The incentives provided to the exporters by the Government gives them a motivation to promote sales in the international market.
• The increasing importance of sports and equipments at school and college level can increase the demand of the sports equipments.
• The dereservation of sports goods industry for small scale industry provides incentives to the large manufacturers to enter into the cluster.

4. Threats to the Cluster
• Emergence of China and other countries as the supplier of sports equipments has adversely affected the demand in domestic market.
• Non acceptance of changing quality and designs may put a serious threat to the firms in cluster.
• Adoption of new technology by other clusters or by other countries may put a threat to the cluster.
• Absence of the urge of innovations by the firms may put a threat to the cluster.
• Stoppage of supply of Kashmir Willow is affecting the functioning of firms.
• Least interest of entrepreneurs in providing training to the manpower may cause a threat to the cluster.
• Changing business environment and emergence of new technology or new designs may put a threat to those firms who resist changes.
9.2 Proposed Model to Improve Competitiveness of the Cluster

The proposed model to improve the competitiveness of the sports goods cluster at Jalandhar is displayed in Figure 9.1. The competitiveness of sports goods cluster is determined by the five major components i.e. factors of production, competition, demand conditions, networking and innovation. Along with these factors, support of Government and business development services providers ensures effective working of the cluster. All these factors within the cluster are interlinked and type and degree of relationship between them are shown in figure 9.1.
Figure 9.1 Proposed Model to Improve the Competitiveness of the Cluster

Factors of Production

Demand Conditions

Sports Goods Cluster at Jalandhar

Innovation

Competition

Networking

Government

Presence of business development service providers
In figure 9.1, arrow indicates that the availability of all factors support the sports goods cluster at Jalandhar as a system and double direction arrow indicates the interconnection of all the factors. The single direction arrow indicates the presence of support services like Government and business development service providers to ensure efficient and smooth working of the cluster. The presence of all these determinants within the cluster can help in enhancing the competitiveness of sports goods cluster at Jalandhar and lead to regional development. The following section explains these determinants and the contribution of these determinants to the success of the cluster.

1. Factors of Production

The competitiveness of the cluster is determined by the availability of factors of production within the cluster. There is nothing more than the required inputs to compete in any industry (Karkkainen, 2008). The presence of sufficient resources ensures smooth working of the cluster. Porter (1990) explained that two types of factors are required by the firms. These are basic factors and advanced factors. Basic factors include national resources, location, capital, availability of raw material and labour. Advanced factors include modern infrastructure and presence of highly educated personnel in the cluster. Porter (1990) explained that advanced factors are the most important for enhancing the competitiveness of the cluster. These factors are necessary for smooth operation of the firms and in turn that of cluster. The unavailability or shortage of any factors of production forces the firms for innovation. The presence of adverse conditions such as scarcity of raw material, shortage of labour and unavailability of infrastructure leads to two situations i.e. either the firms start using resources effectively or firms start developing new designs, methods or products. But both these situations help in improving the competitiveness of the cluster.

With regard to factor condition, every region has its own strengths and weaknesses, but the competitiveness depends upon the efficiency with which factors have been utilized.
2. Demand Conditions

Another important determinant for competitiveness of the cluster is demand of the product. Porter emphasized more on demand in domestic market rather than demand in foreign market as firms are aware about domestic market more than foreign market and react to there demand more quickly. The increase in the demand of the firms’ product motivates them to adopt new technology with less fear that all the facilities will be utilized. Porter (1990) defined that a nations firms gain competitive advantage if domestic buyers are sophisticated and demanding as regards the product or service. These types of customers pressurize firms to innovate faster and develop new products or design. If the consumers are not demanding, the firms will continue producing and supplying same products and will never think of producing anything new.

Demand condition directly affects the performance of the cluster as firms start moving from producing low quality and imitative product or service to innovation and differentiation (Kakkainen, 2008). The pressure from demanding and sophisticated consumer motivates the firm to improve its performance with regard to existing as well as future needs. Porter explained that foreign market did not provide all these benefits but it is the local demand that makes the firm competitive. Porter (1998) explained that in the global economy, the quality of local demand matters more than its size and clusters in linked industries influence setting of demand conditions heavily.

3. Competition

Competition and rivalry within the cluster directly affects its competitiveness. The presence of competitors within the cluster leads to innovation and continuous improvement (Porter, 1990). Before formulating any strategy, the firms always consider the reaction of the competitor located at the same place. The presence of rivalry generates imitation. The presence of large number of competitors in the cluster motivates all the firms to take notice of each others’ action and try to adopt the best strategy to face the competition. As domestic firms are visible to each other, success on the part of one showed that further development is possible in the local circumstances (Davies and Ellis, 2000). The pressure from the firms which are in proximity to each other provides inspiration to the firms to search for innovation and in turn improve its competitiveness.
4. Networking

Networking of firms involves knowledge sharing among the elements of the cluster. Clustering and networking help firms to overcome their major weaknesses and to raise their competitive potential through the emergence of linkages between the firms providing economies of scale (Nadvi and Schmitz, 1997; UNCTD, 1998).

Cooperating firms within the cluster tend to perform better than competing one (Schmitz, 2000). This type of networking helps the firms to complement each other and learn from mistakes of others. The literature on cluster supports that sharing of information within cluster help the firms to reduce the cost of inputs, labour and technology (Marshall, 1910; Porter, 1990; Basant, 2006). Blankenburg et al (1996, p. 1037) argues that through social relations, the firms learn how to cooperate and coordinate their reciprocal activities thereby generating more value along the value chain as compared with a chain in which the firms transact arm’s length.

Swann and Prevezer (1996) suggested that clusters in industries where multiple linkages can be created among the member firms present significantly stronger growth pattern that clusters in industries with much lower linkages between member firms.

Firms within a cluster can work together to co-evolve for the purpose of enhancing the competitiveness and adapting to the environmental change (Niu, 2010). Networking helps firms to exchange information to overcome threats and weaknesses of the cluster, improve its strength and avail the opportunities. It helps the firms in fulfilling those objectives which they can not achieve in isolation. The joint action and cooperation between the firms help the cluster in becoming competitive.

Presence of industry associations also played a pivotal role in bringing all the firms under a common roof and encourage the members to work together to achieve competitive advantages. These associations help in creating horizontal network between the firms and initiate joint action so that firms can overcome the constraints faced by the cluster.

Ceglie (2003) explained that the presence of firms within the cluster is not sufficient for producing external economies. According to author, other factors such as exchange of information, trust building and interaction among the cluster actors,
identification of common objectives, agreement on joint development project and its implementation is necessary for building an efficient cluster.

5. Innovation

In the present changing environment, cluster has to face stiff competition from both domestic and foreign market. Innovation helps in coping with the changing national as well as international business environment. It is an important element for enhancing the competitive advantage and ensures the growth and development of the cluster. For a cluster to be competitive and productive, it is necessary that firms within the cluster undertake various efforts to innovate new products and ideas. The introduction of new product or design within the cluster helps in facing competition and leads to growth and development of the cluster. Clusters provide a fertile environment for the firms to enhance their capacity to innovate. Clusters are seen as an important driver of innovation (Bail, 2008, p.21). Chesbrough (2003) explained that clusters are well aligned with the modern approach of open innovation which suggested that innovation is not created by individual firms but is created in dynamic environment where competent organizations and skilled labour interact in constructive and complementary way to disseminate existing knowledge and generate new ideas and products. The firms located in the cluster are more prone to innovation due to existence of various research institutes, demanding customers, suppliers of raw material and machinery, skilled labour and sharing of information with other firms. Brenner (2003) defined that in the industries with clustering dynamics, innovation are more frequent, showing a high level of cooperation with universities and suppliers. The firms located within the cluster exchange information with the research institutes or universities located in the proximity and can easily develop new designs or products. Further the presence of skilled labour and demanding customer motivates firms to innovate more. The diffusion of information between the firms located in the cluster also enhances the capacity of the firms to innovate. Pouder and St. John (1996) explained that shared infrastructure, geographic proximity and strong links between the clustered firms can create a specific innovative environment. Furman et al (2000) described that the organization which adapt changes most effectively are rewarded by growth in sales, profits and employment. Saxenian (1994) found that exchange of
ideas between the firms and innovation is the main drivers of the success of Silicon Valley.

6. Presence of Business Development Service Providers

Another initiative that can strengthen the competitiveness of sports goods cluster of Jalandhar is the presence of business development service providers in the cluster. This initiative begins with the analysis of the type of assistance required by the firms. It requires deep understanding of the constraints and weaknesses of the cluster, likely threat in the future and the potential of cluster to face such constraints and threats. The presence of business development service providers helps the firms with the following aspects:
1. To provide information relating development of new product, design and technology to the firms located therein.
2. Consulting the experts for preparation and implementation of new business plans and projects.
3. Providing training to the workers.
4. Enhancing the element of networking and cooperation among the cluster actors.
5. Providing assistance to the firms in undertaking research and development initiatives.
6. Maintaining database of various initiatives and policies issued by the Government for the cluster and its implications.

The business development service providers act as one stop shop and point of reference for the actors in the cluster, provide their expert advice to the cluster and promote its growth and development.

7. Government

The final element for the growth of cluster is the Government. The presence of responsive, effective and organized public sector helps in building an efficient cluster. Porter (1990) explained that in order to increase the export earnings and innovative capacity of a region, its Government should interact to develop a sustainable array of internationally competitive industry clusters. Government, through its policies helps in creation of new clusters or strengthening the existing cluster. Government can help the cluster to limit or eliminate barriers to the growth. Porter (1998) defined that both
national and local Governments have an important role in the promotion of a cluster. Besides, creating the framework conditions, rules for competition and promoting entrepreneurial spirit, Government should actively engaged in and promote such an approach.

Government should develop new policies to enhance the innovative capacity of each firm and create an environment that promotes innovation. Various initiatives should be taken to establish various research institutes and universities where new ideas, products and designs can be developed. Measures should be taken by the Government to increase interaction and cooperation between firms and research institutes with regard to development of new product.

The Government should promote cluster based development policies, where each policy should be designed according to the requirement of individual cluster. Government should not frame a single policy for all the clusters in the country but different policies should be designed for different clusters as each cluster is unique and has its own problems and constraints. Further, Government should encourage all the cluster actors to collaborate with each other and work together. Various training programs should be organized by the Government for the workers working in the cluster.

Porter (1998) suggested that Government should promote the formation of cluster and establish centre of range of services in training, design, product and marketing to increase the competitiveness and innovation capabilities of the clustered firms.

**9.3 Conclusion**

The present study proposed a model to improve the competitiveness of Sports Goods Cluster at Jalandhar. The model emphasized on –

1. The important role of factors of production, competition, demand conditions on the performance of the firms.
2. Role of interconnection between all the actors in the cluster.
3. Importance of networking and innovation on the performance of the cluster.
4. Presence of Government and business development service providers to strengthen the competitiveness of the cluster.
Regarding the practical application, the study aims to help policy makers to develop a plan for the growth and development of the cluster. This model can be helpful to less developed and under developed countries which want to establish and develop sports goods cluster.