

## Merits of Industrial Clustering: Case of Date's Industry of Iran

Azam JAMALIZADEH\*, Shahryar SOROOSHIAN\*\*

### Abstract

*Significance of industrial development made many countries consider the formation and strengthening of small and medium industries of industrial fields, in form of cluster as regional industrial development strategy, and utilize it as employment strategy which is able to improve competition abilities of enterprises and so to enhance their export potentials. Above 90 percent of Iran industries are formed by small and medium enterprises, and based on identified properties of industrial clusters in different regions, cluster development is one of the appropriate and effective patterns for business expansion. Considering the importance of date production in Iran, can be said that development of date industrial cluster has a lot of positive impacts in economic, industrial, social and environmental fields. In this study, by using the technique of DEMATEL, 7 major effective criteria on operation of date industrial cluster including 4 operational features, and 3 sufficiency features were recognized and extracted under supervision of the experts and based on the most practical choices which are compatible with the environment of practical structures of industrial clusters. Results of this research show that networking feature has its priority among practical criteria, export feature includes a high influence taking rate, and feature of cluster enterprises has the most effectiveness and interaction with the other studied criteria. This study indicates that using partnership and networking approach is one of the appropriate ways to solve problems of clusters and is operational for other local and regional clusters.*

**Keywords:** industrial cluster, performance, date industry, small and medium enterprises, DEMATEL.

### 1. Introduction

Industrial clusters often are identified as innovation systems because of their existed potential for sharing resources and local knowledge. Industrial clusters mainly consider as industrial systems based on network with purpose of adoption of markets and technologies which change fast (as an organized set) (Keui-Hsien, Niu, 2010). Industrial cluster is a world-wide economic emanation, and it also is considered as an important pattern of modern economic development; furthermore, industrial cluster highly influences optimization of industrial designs and regional economic structure. Both local and international historical experiences in industrial development field show that formation and development of especial industrial clusters, mostly have played a key role in regional economic development (Yuxiang et al., 2011). Industrial clustering is valuable tool for short-term industry attraction enhancement, medium-term strategic development plan in order to protect and expand the existing and certain businesses, and long – term economic purposes for development of regional economic growth (Sarych et al., 2002). Structural adjacency of industrial clusters is considered as a crucial factor in growth, dynamic and success of clusters and so urban economy (lake, 2014). According to many experts, performance of cluster is a complicated and multi-dimensional concept, it is mentioned that cluster performance including innovation created by cluster performers, success rate in commercialization of produced goods, and new formed companies (Alam Tabriz et al., 2013).

One of the Iran Small Industries and Industrial Parks Organization (ISIPO) experts in cluster fields, defines national clusters including enterprises and industries which linked together through vertical (purchaser, supplier) or horizontal relationships (costomers, technology, and etc.), and their major players are located at a same geographical place. The industrial

cluster is the product of the four factors that make the “diamond of competitive advantage”: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure and rivalry (Manus, 2007). Industrial cluster is a socio-economic institution in particular geographic area which is recognizable by local residents and economic institutions where majority of people and economic institutions are active in economic related tasks, subscription and boosting their share of production, technology and organizational knowledge for production of goods and services (Morosini, 2004).

Industrial clusters are representations of small and medium businesses which with formation of regional networks cooperation, achieve economies of scale, integration, learning and suitable innovation capacity, and provide a source of local and regional competitive advantages (Dadashpoor et al., 2007). A high share of industrial firms of the world countries is allocated to the small and medium enterprises so that in most countries, small and medium enterprises form more than 95 percent of production units and provide two-thirds of employment in the private sector (Javidniaa et al., 2012). Small and medium industries as it is explained (Sorooshian et al., 2011; Sorooshian et al., 2013), impact on the global economy at least from dimensions of entrepreneurship, industry dynamics and creating employment and income. SMEs, also known as Small and Medium Enterprises, face a difficult business environment but lack the resources to pro-actively respond to changes in the business environment. Previous domestic studies on consulting focused mainly on theory, and particularly on large businesses (Kim et al., 2015).

Organizing these enterprises into the form of industrial clusters would be one of the most important strategies to enable small and medium-sized enterprises to attend in global competitions. In the developed countries, cluster was introduced as an appropriate tool for strengthening of national and regional

\*Department of Industrial Engineering, Zahedan Branch, Islamic Azad University, Zahedan, Iran; E-mail: az.jamalizadeh@gmail.com

\*\*Faculty of Industrial Management, Universiti Malaysia Pahang, Malaysia; E-mail: sorooshian@gmail.com