CLUSTER MANAGEMENT PRACTICES IN ROMANIA AND THEIR IMPACT ON THE DEVELOPMENT OF LOCAL CLUSTERS

Gergely TÖRÖK

Babeş-Bolyai University, Faculty of Geography, Cluj-Napoca, E-mail address: torokgergo@yahoo.com

Summary: In our days, clusters and cluster policies have begun to play an increasingly important role in the economic and political environment alike, being mentioned more and more often in relation to new development policies as an easy solution for the complex problems of the economy. Since the elaboration of cluster theories, the concept itself has undergone considerable modifications, gathering numerous supporters but - especially in recent years - a series of critics as well. During recent years in Transylvania, following a wellestablished trend in the European Union - a series of cluster initiatives have started to appear, fuelled either by bottom-up initiatives of companies, research institutions from related industries or third party organizations seeking financial gains from cluster management services or external funds. In accordance with the guidelines of the European Cluster Excellence Initiative (ECEI) - initiated by the European Commission, aimed at the development of methodologies and tools in order to support cluster organizations to improve their capabilities in the management of networks and clusters - the present paper aims to analyse the clusters of Transylvania from five different points of view (cluster actors, typology and structure, financing, strategies and achievements), considering elements regarded to have the greatest influence on the successful functioning of such structures. Although the aim of the ECEI with above indicators was to be able to award different labels to clusters across the European Union, our objective is to analyse the managements structures and behaviours of clusters during a longer period, following the changes of direction and different approaches in time.

Keywords: clusters, management, certification, regional development

1. Introduction

All over the world there are a wide variety of cluster definitions, each adding different elements, trying to better describe the multitude of connections and relations which make up a cluster in the real sense of the word. But probably none of them sums up the idea better than the one from Lefebvre, professor at the Ecole des Mines de Paris, who says that "There is no real adequate definition for a cluster. In reality, there are very different types of clusters to be found, involving different types of partners from industry, research, education, policy, (...). The two most famous examples of clusters, Silicon Valley and the Italian districts, are extremely different in their nature and ways of bringing the actors together" (Committee of Regions 2010). Although even the name has suffered a series of changes (competitiveness pole, industrial agglomeration, etc.), the basic concept has essentially remained the same, representing the close cooperation between companies, research institutions and other stakeholders in a geographically delimited area.

Nowadays, probably the most well know definition is given by the man considered the "father of cluster theories", who said that clusters are "a geographical concentration of firms interconnected by being part of the same industry or the same supply chain, by a common resource or market, by a similar philosophy, by facing similar opportunities and challenges"

(Porter 1994). A somewhat different approach can be observed in the works of Andersson, who defines clusters as a "critical mass of actors, resources, competences (in absolute terms - in relation to cluster competitors in other regions – but also in relation to other cluster candidates in the respective region) in order to sustain interaction between the cluster actors in the long term and to attract new members" with an existing "interaction and cooperation of firms which carry marked features of both competition and cooperation" (Andersson et al. 2004). While we could find a series of other definitions, we consider that the main characteristics and key points are summed up by Porter: "A cluster, then, is an alternative way of organizing the value chain", emphasizing on the importance of geographical proximity which results in repeated exchanges, better coordination and a robust organization form leading to advantages in efficiency, effectiveness and flexibility (Porter 1998).

Resulting from the above definitions it is plain to see, that the variety of cluster types involve a variety of activities, different types of members (public authorities, research institutes, catalysts and companies) and can have different objectives, therefore they need to be organized and managed in a variety of different ways in order to meet the needs and demands of the members and the economic environment. This on the other hand usually has a significant impact on the type and structure of clusters, the management, the financing mechanisms as well as the development strategies and results as an independent structure.

In the last years, the role of clusters in promoting economic development has been widely recognized across the EU, clusters playing an important role in promoting competitiveness and innovation, in developing new knowledge, transforming it into services and products while at the same time creating jobs and stimulating growth. An efficient cluster management is a key element for being able to harness this potential, as it has been demonstrated by the European Cluster Excellence Initiative (ECEI), which pointed out the existence of a direct relationship between the strategies and the quality of cluster management organizations and the effects on business, R&D and internationalization activities of cluster participants.

2. Certification – The European Cluster Excellence Initiative

During the 2009-2012 period, the European Cluster Excellence Initiative (ECEI) which was started by the European Commission has aimed for the development of methodologies and tools for cluster organizations to improve their capabilities in the management of networks.

In the absence of a proper management, the chances that the cluster will be able to achieve its mission and objective to support its members, the industry and the region as a whole cannot be ensured. Therefore, in order to provide a proper management assessment tool, the European Cluster Excellence Initiative (ECEI) has created the base for a mutual understanding of cluster management excellence as well as a way to measure and improve it. The approach has turned out to be quite complex, but – in spite of its complexity – it has a high applicability and has proven to be a very effective tool in assessing the stages of development in the case of clusters as well as in helping them improve and develop as an excellent cluster organization. In this sense, along with the framework for labeling cluster management a set of 31 quality indicators has been developed along with the corresponding assessment approach. The aim of this new tool was the desire to have a quality labeling system for professional cluster management accepted and recognized throughout the EU.

Another important benefit for developing such a methodology which has been overlooked by the ECEI initiative is the level of trust ensured by such a widely accepted label in relation to third party organizations. With a series of funding opportunities available, cluster initiatives created in the last period in Romania (but in other parts of Europe as well) have often been used as instruments for attracting EU funds, at the same time lacking the ability, but also the desire to represent common interests of member organizations or to initiate a closer collaboration among them. Since any association fulfilling some criteria regarding the types of members could become a self-proclaimed cluster, the cluster concept itself had become diluted, the title itself being no guarantee for a functional structure behind the name.

Labeling clusters is not new as such. Most EU Member States all over Europe have already started setting up cluster support programmes, often focusing on the most competitive sectors of the economy. However, the applied selection mechanisms often follow national priorities or political objectives and most often have no regard for the administrative capacity of the respective cluster organization. According to the ECEI methodology Cluster Management Excellence GOLD Label can be awarded to cluster organizations which have reached a very high level of excellence with regard to the quality criteria and are striving to become ever better. The rationale of the GOLD Label is to demonstrate that the cluster organization not only has an excellent status of cluster management, but that it has also implemented a comprehensive process of further improvement. This further indicates that being awarded the GOLD Label, a cluster organization is in a process of continuous improvement. A Cluster Management Excellence BRONZE Label on the other hand is awarded to cluster organizations taking part in a self-assessment based cluster benchmarking process and receiving feedback regarding areas for further improvement and feasible improvement measures.

3. Cluster Management Excellence BRONZE Label in Northern Transylvania

In Romania at the moment there are around 73 cluster organizations in total, of which 45 are registered with the ClusteRo Romanian Cluster Association. Up until now, out of the 73 clusters a total of 15 Romanian cluster organizations have been awarded the Cluster Management Excellence BRONZE Label of the European Cluster Excellence Initiative. It is worth mentioning, that in the EU there are a total number of 689 clusters with BRONZE Label certification and 47 organizations which have received the Cluster Management Excellence GOLD Label. No Romanian cluster has been awarded the GOLD Label yet.

At regional level, in Transylvania there are a number of 6 clusters certified with BRONZE Label, being proof that all cluster structures have begun to improve the quality of their management. The organizations which have received the above distinction are the Cluj IT, iTechSylvania in the field of IT industries, the Transylvania Furniture Cluster activating in furniture production, the AgroTransilvania and the Regional AgroFood Clusters in the field of food production and processing as well as the PrelMet Transilvania Cluster working in the field of metal manufacturing.

Each cluster has been analyzed based on interviews conducted with cluster managers covering 31 indicators related to the structure of the cluster, management and governance, financing, services provided, contacts and interaction within the cluster as well as recent achievements. All results have been presented by an individual report to the cluster management and have included recommendations for further improvement in line with the requirements of the cluster quality label developed by the ECEI.

In our analysis a greater importance will be given to the clusters from Northern Transylvania which have been awarded the BRONZE Label (Cluj IT, AgroTransilvania Cluster, Transylvania Furniture Cluster), not considering the iTechSylvania cluster, since it represents a spin-off of Cluj IT, in charge of implementing a HR development programme.

3.1. Structure and cluster actors

Regarding the structure of the analyzed clusters, all three of them have more than one year of activity, the IT Cluster being formally registered in October 2012, the AgroTransilvania Cluster in February 2013 while the Transylvania Furniture Cluster in May 2012.

With regard to the members, the Cluj IT Cluster consists of 4 higher education and research institutions, 8 public institutions and catalyst organizations as well as 30 IT companies, all very different in size, from small local initiatives to multinational companies. The geographical coverage of the cluster can be considered the larger Cluj-Napoca area, Cluj having reached the status of the most important IT hub in Romania after Bucharest.

Despite being active in a more traditional type of industry, the Transylvania Furniture Cluster has 7 research entities among its members, including innovative SMEs, research institutes as well as universities. There are a total of 24 members, mainly producers, although the rate of the active members is somewhat lower than in the previous case, which can also be attributed to the fact, that the cluster is territorially more extended. Also we can see a very high number of catalyst structures, from associations to consultancy companies and training centers.

In the case of the AgroTransilvania Cluster we can observe the presence of three large highly companies representative for the food industry in the region, the rest of the members being small family enterprises and farmers brought together under the umbrella of two regional producers' associations. We can also see the presence of two universities from Cluj, the Technical University and the University for Agricultural Studies, as well as a number of three catalysts, in charge with the management of the cluster.

As a surprise we can see neither financial institutions, nor PR and marketing companies among the members. It seems that PR in the case of Romanian clusters is mainly ensured internally, while the financing of common projects is usually provided by EU funded initiatives and new projects have not been attractive enough yet to catch the eyes of financers. Regarding the commitment of the cluster members, we have been able to conclude that the most committed members can be found within the Cluj IT cluster, where almost 80% of the members are active within the working groups and the common projects of the cluster, while the participation rate is significantly lower in the case of the other 2 clusters which are also territorially not that concentrated.

3.2. Typology and governance

Looking at the typology and governance, all of the analyzed clusters align to requirements imposed by EU funding programmes – they dispose of own personnel with experience in the management of EU funds as well as network structures similar to clusters, ensuring day to day operations of the organization (management, PR, IT, secretariat, etc.). Also, each cluster organization has a Management Council as well as a General Assembly of the Members.

Although not part of the assessment, if we were to analyze clusters based on transaction costs among members based on a methodology developed by Gordon and McCann in 2000 (Török 2013), we would find that all three clusters fall into the category of social networks. According to the mentioned classification, the furniture and the AgroTransilvania Clusters can be considered old type social networks due to the fact that the sources of innovation are external and the possibilities to attribute revenues resulting from innovation and technological opportunities are low. The cumulativeness of knowledge is relatively high in both cases, innovations being reliant on past knowledge and traditions, with a knowledge base concentrated along well established collaboration networks while governance – especially in the case of the AgroTransilvania Cluster – is based on historical networks. In the case of the IT cluster on the other hand, representing a new type of social network, the source of innovation is largely coming from within, with a high level of competition, high opportunities

and an uncertain environment. Because of this, the cumulativeness of knowledge can almost be overlooked; the knowledge base is closely reliant on continuous research while the governance is largely determined by the personal relations and the social networks within.

3.3. Cluster Financing

Regarding the financial management of the cluster organizations, all clusters have access fees as well as monthly membership fees. But a very important factor in the case of financing is the access to EU funds which – besides management activities – can also be used for financing innovation, PR, promotion and most important: research and HR development projects. Even though the main purpose of the clusters is to represent their members, on one hand the financial contribution from projects has been a significant incentive for the members to take part in the initiatives, while on the other hand, the financial aid takes away some of the burden from the members' shoulders related to the financing of cluster activities.

3.4. Strategy, Objectives, Services

Probably the most important aspect when talking about cluster management is the long term vision and development strategy as well as the commitment of members to implement the foreseen activities to achieve common objectives. After studying the strategic documents of all three clusters we can see that all of them have well developed and thought through strategies where market challenges have been identified, even if - especially in the case of clusters belonging to the types of traditional social networks – the involvement of members in the decision making process has been difficult. Strategic objectives and action plans have been documented accordingly, although implementation plans are usually determined by the different development projects, since much of the cluster activities are organized around ongoing projects with external financing. On the other hand value chains have been harder to define in the field of IT and the furniture, where in the first case the business environment is very dynamic while in the second case collaboration between the members is more horizontal. Since the clusters are relatively new and with not too much experience on elaborating strategies and implementing action plans we do not have sufficient information on whether or not the actual strategies have been monitored or revised according to results of the previous years. Even though due to length constraints we cannot go into detail related to general strategic priorities like innovation, business opportunities, fostering entrepreneurship, human resources development, marketing and branding, improving cluster-specific framework conditions or internationalization, we can summarize by saying that the Cluj IT Cluster puts high emphasis on the development of HR, branding, internationalization, along with the furniture cluster, while the AgroTransilvania cluster promotes a closer collaboration among its members.

Also the working groups are more developed and more functional in the case of the Cluj IT Cluster, having 5 areas of interest: innovation, entrepreneurship, HR, eHealth and branding, even though the other two clusters also mention areas of interest on their websites. The web presence is similar, the Agro-Transylvania and the furniture cluster both have outdated information on their websites along with some more recent news, while the Cluj IT cluster website has been rethought many times and is updated with fresh and up to date information.

3.5. Achievements, Recognition

Last but not least, the 5th criteria on which the clusters have been evaluated are related to the achievements and recognition received. In this case it is beyond doubt, that all clusters have obtained significant results in the last years, with success stories on international

collaboration, achieving public support for own projects, raising public awareness regarding their field of activity, branding or introducing common products and services, even though an adequate collaborator and customer satisfaction assessment in quite hard to elaborate for such a short period of time. Regarding web and media presence all three structures have been well represented not only within the local, but also the national media, but once again, the Cluj IT cluster has been the one which has managed to attract the most media coverage.

4. Conclusions

Willingness to collaborate among companies in Romania can be considered somewhat lower compared to other EU states, which can be attributed to path dependency and negative experiences in the past. In consequence, when trying to establish cluster organizations there have to be a series of incentives offered to companies in order to overcome this initial barrier and start off on a road towards collaboration with their own competitors.

The fact that in Romania there are already 74 documented clusters (the final number might be higher) is a good indication that old mentalities are changing and evolving, market beginning to recognize, that European or global market presence is not possible without a common initiative and without uniting forces. Even though the BRONZE Label for cluster management excellence can be awarded to any cluster taking part in the benchmarking process, we consider that the aforementioned structures – with the necessary public support and the collaboration of its members – are on their way to achieving the GOLD Label certification as recognition of their efforts for becoming excellently managed organizations.

As we could see, the structure and the management of the clusters is not so much determined by the field of activity, but rather by the ongoing projects and the structures required by financing programmes. Although in the near future we can foresee a reduction of funds allocated to the establishment and financing of local clusters in the EU, there is a strong trend in facilitating a close collaboration among different clusters for creating interdisciplinary working groups and supporting the emergence of cross-sectorial innovations.

The reduction of financing however must not be attributed to the decreasing importance of clusters, quite the opposite – since clusters are becoming stronger and more self-sufficient by profiting from good practices and previous financing, it is considered that external support is not needed anymore, funds being channeled only towards clusters with a greater potential for global presence, directly contributing to increasing the competitiveness of the EU.

References

- 1. Andersson, T., Serger, S.S., Soervik, J., Hansson, W.E. (2004): Cluster Policies Whitebook, International Organization for Knowledge Economy and Enterprise Development (IKED).
- 2. Porter, M.E. (1994): The Role of Location in Competition, "Journal of Economics and Business", 1. p. 35-39.
- 3. Porter, M.E. (1998): Clusters and the new economics of competition, "*Harvard Business Review*", November-December, p. 77-90.
- 4. Török, G. (2013): The clustering potential in Transylvania based on the concentration of economic activities and regional specialization, "*Studia Universitatis Babeş-Bolyai, Series Geographia*", 2013/2, p. 20-35
- 5. *** Committee of Regions (2010): Clusters and clustering policy: a guide for regional and local policy makers, Belgium
- 6. *** European Secretariat for Cluster Analysis (2015): http://www.clusteranalysis.org/benchmarked-clusters/?country=8a21454fb8154208b59c972ad47bb4ed