

## EVALUATION OF CLUSTER POLICY IN LATVIA

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### **Abstract**

Purpose – The purpose of this paper is to evaluate the cluster policy in Latvia and to provide recommendations for the cluster policy further improvement.

Design/methodology/approach – Theoretical and empirical research methods are used, e.g. literature review, analysis of the European Cluster Memorandum, the survey of Latvian clusters representatives and interviews with experts of the Ministry of Economics of the Republic of Latvia.

Findings – The findings suggest that generally the cluster policy in Latvia is poorly developed in comparison with the desired state and best practices in Europe.

Originality/value – Cluster development is one of the innovation drivers, which strengthen competitiveness and enables growth of companies and whole economy. This paper examines the cluster policy in Latvia. The research findings could be useful for cluster policy makers, fostering development of existing and emerging clusters.

**Keywords:** cluster, policy, European Cluster Memorandum, innovation

### **1. INTRODUCTION**

Over the past two decades there has been growing interest in business cluster concept which has become a subject of many research papers and studies. Already in 19th century Alfred Marshall (1920) in his book “Principles of Economics” has described the advantages of agglomeration of economic activities. Marshall believed that due to the concentration in close geographical proximity within “industrial districts” the firms obtain the benefit of large – scale industrial production and of technical and organizational innovations.

The Marshall’s agglomeration concept was developed and popularized by Michael E. Porter in his book “The Competitive Advantage of Nations” (1990). Porter has defined cluster as a geographic concentration of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions, e.g. universities, standards agencies and trade associations in particular fields that compete but also cooperate.

Porter (2008) explains that the concept of clusters comprises three dimensions: firstly, clusters are geographical concentrations of specialized firms, advanced skills and competences in the labor forces and supporting institutions; secondly, clusters functional purpose is providing a range of specialized and customized services and, thirdly, clusters can be considered as dynamic social and organizational elements that connects different innovation actors, e.g. universities, business and public authorities. Moreover, Porter (2008) notes that the geographic scope of cluster can range from a single city or state to a country or even a network of neighboring countries.

Based on the cluster concept conducted by Porter different researchers have explained the cluster concept and factors determining cluster emerging and growth. Although the explanation of the cluster concept provided by different researchers generally distinguishes, there are common features: geographic proximity and cooperation of firms and institutions. Rosenfeld (1997) indicates that cluster represents concentrations of firms that are able to produce synergy because of their

geographic proximity and interdependence.

Boja (2011) gives following characterization of the cluster: regional economic activity, limited to a specific industry, includes both vertical links: supplier-manufacture-dealer-customer chain or horizontal production links: sectors of the same industry, cluster companies are working in identical or interrelated business areas and are in competition but through specialization contribute to the cluster development, cluster companies proximity generates social and trust relations. From author's point of view, cluster could be not limited only to a specific industry, but clusters are formed also on the sector level comprising similar industries (e.g. audiovisual sector cluster) or for certain problem solving (e.g. aging cluster).

According to the Sustainable Development Strategy of Latvia (2010) clusters are co-operation networks of merchants, research, educational and other related institutions, which operate in a specific sector or interconnected sectors of national economy, use related technologies and labor force resources of similar profile, consist of legally independent merchants that are competing and cooperating. The authors of this research paper consider that the clusters on industry level and clusters for certain problem solving have to be added in this definition thus giving better understanding about the nature of cluster and would be useful for reconsideration of national cluster policy.

The aim of this research paper is to evaluate the cluster policy in Latvia. This paper consists of four parts. Firstly, the authors analyze the role and significance of the business clusters, their impact on economic growth and innovation, as well examine how state cluster policy influences the clusters emergence and development. Secondly, the authors focus on the political documents and programs concerning cluster policy in Latvia, e.g. European Cluster Memorandum, Sustainable Development Strategy of Latvia until 2030, National Development Plan of Latvia for 2014 – 2020, Guidelines of National Industrial policy 2013 – 2020, Cluster program co-financed by the European Regional Development Fund (ERDF) and Baltic Sea Region program's project "StarDust". Thirdly, the findings of the survey of clusters representatives and of interview with officials from the Latvian Ministry of Economics on the issue of cluster policy in Latvia conducted by authors are presented and analyzed as well the main problems and positive aspects of cluster policy in Latvia are pointed out. Finally the recommendations for cluster policy improvement are provided.

## **2. LITERATURE REVIEW**

Economists, management professionals, researchers and policy makers stress a significant role of business clusters in the state and region economic development, declaring that clusters increase competitiveness of the companies; they are a driving force for innovation and productivity growth. Porter (1990) argues that clusters attract foreign investments and are the source of jobs, income and export growth. Porter (2008) suggests that clusters promote productivity increase of the cluster companies, their capacity for innovation and stimulate new business formation.

Rosenfeld (1997) states that business clusters add value to a region and foster long-term economic growth.

Sölvell et al. (2003) indicate that companies active in strong clusters and regions with strong clusters perform better. Porter and Sölvell et al. admit that clusters offer ground for innovation.

Boja (2011) makes a conclusion that economic development based on cluster models brings multiple benefits for the regional development and competitiveness in an industry as well creates an economic environment which is able to adapt easily to economic crises and other economic and social transformation.

According to the European Cluster Memorandum (2007) clusters are key drivers of innovation and prosperity, they are considered to be key factors in attracting capital, people and knowledge.

Waits (2000) points out that industry cluster concept has proved to be a powerful framework for firms to cooperate together and work with government to meet cluster specialized needs and

promote their interests. Newlands (2003) argues that cluster firms jointly can get cheaper finance, purchase materials for a better price, conduct common research and other cooperative activities based on trust. However, despite the cooperation between the cluster companies, they continue to compete with each other and with other firms, often more on quality than price.

Although there are many authors who emphasize the advantages and benefits of business clusters there are some scientists who express the criticism on cluster concept. For example, Martin and Sunley (2003) claim that the evident problem in the Porter's cluster definition is the lack of clear industrial and geographical boundaries and explanation how strong the linkages between cluster companies have to be. Newlands (2003) also asserts that Porter's definition of cluster prompts questions of the meaning of term "geographic concentration".

As an important factor for cluster emerging and development a majority of researchers consider cluster development and support policy.

Sölvell (2009) points out that cluster policy can be interpreted in two ways: firstly, microeconomic policies that influence clusters in more general terms, i.e. policies for clusters, or secondly, specific cluster policies which target particular clusters. The author considers that both types of policies play a role in the clusters formation. Microeconomic policies influencing clusters development include a number of traditional policy areas such as science and innovation, competition, regional development, trade etc. In this research paper the authors make an assessment of the cluster policy in Latvia which targets particular clusters.

Cluster policies are defined as specific governmental efforts to support clusters by specific cluster programs of government and initiatives (EC, 2008). Waits (2000) indicates that state, regional and local development agencies can involve clusters in economic development and listen to their opinion by adding cluster representatives to their boards and having special summits with clusters.

Porter (2008) comments that government's role is collecting cluster-specific information, setting educational policies, encouraging public universities and schools to respond to local cluster needs, simplifying regulations significantly affecting the clusters and improving the sophistication of local demand for cluster products and services. Moreover, Porter (2008) is convinced that government investments should be focused on improving the business environment in clusters rather than on individual firms, economy branches or on the whole economy.

Rosenfeld (1997) makes a suggestion to the policy makers to support clusters because of their economic dominance, strategic importance and potential as well to improve the technical support services needed to develop an innovative and growing cluster, e.g. support investments in specialized education and training, technical assistance hubs, research and development. Furthermore, Rosenfeld points out that the public policy should support cluster connection building with other clusters and regions, because such networking ensures the flow of new ideas into the clusters and helps them innovate, diversify and grow stronger.

In the European Cluster Memorandum (2007) it is highlighted that government policy at the national and regional level has a substantial impact on clusters, e.g. by strengthening business environment, and on capability of clusters to reach their full potential. It is stressed that effective government cluster policies should mobilize and support cooperation between different groups affecting cluster performance: cluster companies, government agencies, research and educational institutions. The success of cluster policy depends on integrating a number of government policies: innovation financing, creating of effective educational system and stimulating private sector activities.

The task for regional and national government is strengthening the potential of clusters, promoting that collocated companies become dynamic clusters which collaborate and develop. Cluster initiatives are considered to be an important tool to achieve this goal.

Kassalis (2011) indicates that in the framework of cluster initiative the dialogue within cluster and with public sector is maintained, the cluster markets, products, networks are assessed as well the regulatory and business burdens and new market opportunities are identified. Initiative purpose

varies, but mostly focuses on supply chain, integration or process improvement, workforce development, branding etc.

### **3. CLUSTER POLICY IN LATVIA**

Although in Latvia it is discussed increasingly on the positive influence of business clusters on companies' competitiveness and economic growth, the state of cluster development is poorly developed. According to the Global Competitiveness Report 2012-2013 Latvia is ranked 99th from 144 countries in terms of cluster development state.

It indicates necessity to put much stronger efforts for improvement of cluster development to release the hidden potential of economy. In last ten years several dozen clusters initiatives have been launched in Latvia, the oldest of them are IT cluster and Latvian Forest Industries cluster. Development of the majority of the Latvian clusters is coordinated by the industry associations. During the interview with the authors of this research paper the experts of the Ministry of Economics indicate that Latvian clusters are mostly focused on the export promotion. Presently in Latvia the official register of all Latvian clusters is not kept therefore there is no official data on the number of the clusters in Latvia. It is to note that in Latvia the Ministry of Economics is responsible for the cluster policy and program elaboration and the Investment and Development Agency is responsible for the cluster program implementation.

In order to promote the cluster development in the country the government of Latvia has developed and signed several strategic political documents concerning the business clusters development. Together with a number of European countries Latvia has signed the European Cluster Memorandum elaborated by the High level advisory group of experts on clusters, presented in 2007 and discussed at the European Presidency Conference on Innovation and Clusters, which was organized under the Slovenian Presidency in Stockholm on 22-23 January 2008. The European Cluster Memorandum presents principles for the European cluster policy and it calls all cluster policy stakeholders working at regional, national and EU level to provide an agenda for policy action to promote European Innovation through Clusters.

According to the European Cluster Memorandum and Sölvell (2009) cluster policies contribute to the development and competitiveness increase of existing clusters and to the improvement of the opportunities for new clusters to emerge. Executors of cluster policy should support the emergence and growth of dynamic innovative clusters and knowledge concentration area; implement more effective policy impact assessments and strengthening cooperation between cluster initiatives and their participants to learn from each other. Policy setting institutions at national and regional level should design and support cluster programs and initiatives; develop portfolio approaches to cluster policy, i.e. mobilizing existing clusters, facilitating the emergence of new clusters and promoting structural change, where cluster has lost competitive advantage; provide feed-back mechanism from cluster initiatives to horizontal policies as well improve the overall environment for innovation in Europe by ensuring the risk capital availability, supporting research and investments in innovation.

In the Sustainable Development Strategy of Latvia until 2030 the cluster development program is mentioned as a tool for creation of user-driven innovation and for development of rural area, the establishment of creative cluster as a tool for strengthening the creative environment and contribution to the establishment of creative society. In the Sustainable Development Strategy of Latvia until 2030 and in the National Development Plan of Latvia for 2014 – 2020 it is pointed out that the growth of Riga as a business, scientific, cultural and tourism center of Northern Europe can be ensured by combining the national scientific and business potential and creating clusters for science and research and for the growth of innovative and technologically intensive companies. According to the Guidelines of National Industrial policy 2013 – 2020 it is necessary to support export cluster initiative in order to promote the export of the Latvian companies.

In order to support cluster development in Latvia the activity "Cluster program" co-financed by the ERDF was created. The purpose of the program is the promotion of cooperation among

companies, research and education institutions fostering increasing competitiveness of the companies and branches, export growth and innovation development. In framework of this program 3.4 million LVL are available, co-financing rate is till 85%-90% depending on the supported activity, the project implementation is planned till June 2015 (Cabinet of Ministers, 2011).

In the framework of StarDust project of the Baltic Sea Region program supported by the ERDF it is planned to create 5 international clusters or companies transnational collaboration networks in following fields: telecommunications, clean water technologies, design formation for a more comfortable life in the retirement homes, aging people involvement into social life and water transport. Into the implementation of this project 34 project partners from 10 Baltic Sea region countries, including Latvia are involved. Supported activities are joint activities of project's development, new cooperation partners search and training (Investment and Development Agency of Latvia, 2013).

Analyzing the above mentioned strategic documents the authors of this research paper note following: although the necessity of the cluster formation and development is mentioned in the Latvian strategic documents, action plan or strategy for further clusters' growth in Latvia is not developed. From authors point of view a clear clusters development action plan should be elaborated with purpose to improve current cluster development state in the country.

#### 4. METHODOLOGY

In the framework of this research the survey of Latvian clusters and the interview with the experts of the Ministry of Economics of the Republic of Latvia, the Entrepreneurship Competitiveness Department were conducted with the purpose to evaluate the cluster policy in Latvia and to analyze whether the key points of the European Cluster Memorandum signed by Latvia and a number of European countries are fulfilled in Latvia. In this part of the research paper the survey and interview results are analyzed.

Taking into account that at the national level the official register of Latvian clusters is not kept and the official data on all Latvian clusters is not available the authors of this research paper have sent the questionnaire to following 15 clusters which are more active in Latvia: Latvian IT Cluster, Life Science Cluster of Latvia, Food Production Quality Cluster, Latvian Wood Construction Cluster, Metalworking Cluster, Latvian Supply Chain Cluster, Sustainable Tourism Cluster of Latvia, Latvian Electrical Engineering and Electronics Industry Cluster, Gauja National Park Tourism Cluster, Latvian Health Tourism Cluster, CleanTech Cluster Latvia, Green-tech Cluster, Vidzeme Food Cluster "LATinnofood", Industrial Energy Efficiency Cluster and Space Technology Cluster. The response was received from 9 clusters or response rate is 60%.

The cluster development policy in Latvia is evaluated by the Latvian clusters participated in the survey as weak, namely, in range from 1 (the cluster policy is not implemented) to 5 (the cluster policy is implemented at the necessary level) it was assessed on average at 2.2. The majority of clusters (44%) have graded the cluster policy in Latvia "2" (Figure 1).

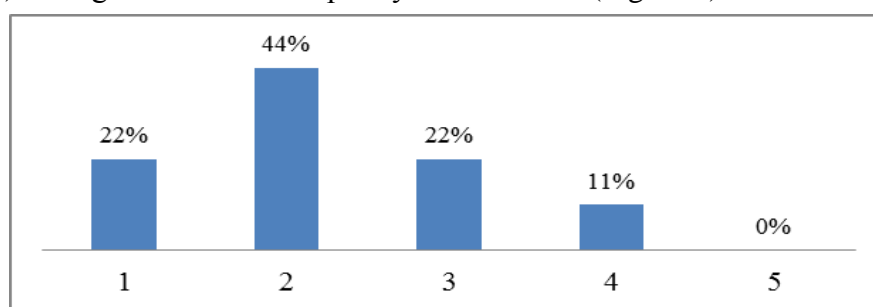


Figure 1. Clusters evaluation of the cluster policy in Latvia in range from 1 to 5

*Source: survey conducted by the authors*



According to the assessment of the cluster policy in Latvia provided by the clusters' representatives the attention to the clusters development is paid episodically by the state authorities. The clusters' support measures are not carried out permanently. The majority of the clusters consider that presently the cluster development policy in Latvia is based only on the Cluster program co-financed by the ERDF. It is noted that the financing of the Cluster program is not sufficient and indicated that in the period 2014-2020 it is planned to reduce the cluster financing amount of the ERDF. A short term (3 years) of the projects implementation is mentioned as a negative factor of the Cluster program. It is emphasized by one cluster that in the framework of the Cluster program the regional dimension is not taken into account and there are no other cluster support mechanisms on the regional level for the cluster initiatives which are not branch association projects.

In the framework of the survey the clusters' representatives suggest several recommendations for the cluster policy improvement in Latvia. They propose to the state authorities to elaborate clear, long-term programs and action plan for the clusters' support and development involving clusters' leaders. The authors of this research paper note that with the purpose to ensure a long-term clusters growth in some countries the state cluster strategy is developed. In Latvia the state cluster strategy has not been elaborated and referred to the experts of the Ministry of Economics presently it is not planned to elaborate it.

Several clusters' representatives suggest elaborating cluster program with a focus on regional cluster initiatives. Some clusters' representatives consider that in the framework of the Cluster program the project implementation should last at least 5 to 7 years and not 3 years as it is presently. On the opinion of clusters by elaborating the cluster policy it is significant to take into account the experience of the European countries choosing the better solutions and initiatives for Latvia.

With purpose to promote the development of the innovative clusters Latvia together with a number of European countries has signed the European Cluster Memorandum. However the survey results show that the representatives only of four clusters or 44% of all clusters participated in the survey know what the European Cluster Memorandum is and they assess the implementation of the Memorandum key points as unsatisfactory. It indicates that there is no efficient communication between state officials and clusters about the initiatives taken by government and further actions are needed in order to create favorable environment for clusters development.

The experts of the Ministry of Economics indicate that the key points of the European Cluster Memorandum were taken into account by developing the Regulation of the Cabinet of Ministers on the Cluster program co-financed by the ERDF.

In order to promote the emerging and development of innovative clusters in Latvia it is significant to establish a constructive dialogue between clusters and public authorities which are responsible for cluster policy elaboration and development. The representatives of most of Latvian clusters participating in the survey admit that clusters and public authorities collaborate only occasionally during working parties, conferences, discussions and consultations or communicating via e-mail. Therefore the majority of the clusters' representatives point out that cooperation between public authorities and clusters should be improved. The experts of the Ministry of Economics indicate that the meetings with 11 clusters which in the framework of the Cluster program have received the co-financing by the ERDF are organized quarterly, i.e., the cooperation regularly occurs only with 11 clusters supported in the framework of the Cluster program. It is to emphasize that according to the survey only 5 clusters or 56% of all clusters participating in the survey have received the co-financing by the ERDF in the framework of the Cluster program, 3 clusters or 33% of all clusters have applied for the co-financing but their projects were not approved and 1 cluster or 11% of all clusters has not applied (Figure 2). Therefore, the authors consider that in order to establish a constructive dialogue with clusters the Ministry of Economics in cooperation with the

Investment and Development Agency should regularly organize meetings with all Latvian clusters and not only with clusters which are co-financed in the framework of the Cluster program.

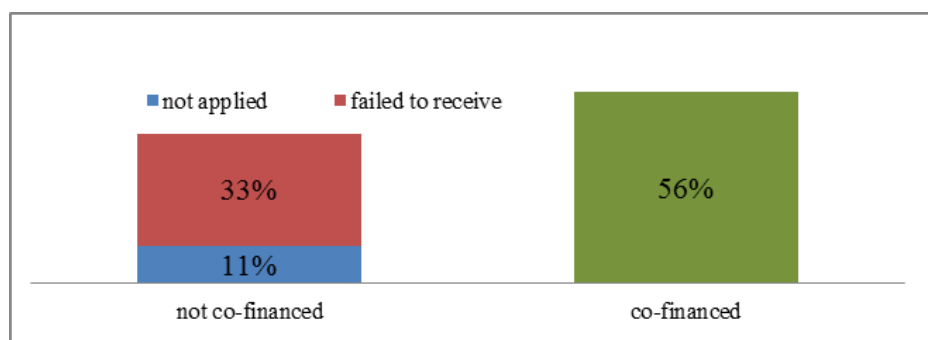


Figure 2. Co-financing of the clusters in the framework of the Cluster program

*Source: survey conducted by the authors*

In the questionnaire the clusters' representatives were asked to mention positive factors and general barriers for clusters growth in Latvia (Table 1). According to the information provided by the clusters' representatives as a negative aspect for the cluster development in Latvian regions the shortage of financing for development of the regional clusters is mentioned. The clusters' representatives complain that in general Latvian society and Latvian firms have little understanding of the business clusters and its positive impact on the economic and regions growth. Insufficient state support for the cluster international integration and cooperation is also mentioned as obstacle for the clusters' development. As general barriers for clusters' growth following factors are listed by the clusters' representatives: insufficient state investment in innovation and research, several bureaucratic burdens and political lobby for the large state companies. As an obstacle for the clusters' development in Latvia the experts of the Ministry of Economics mention the lack of collaboration skills between Latvian companies and incomprehension that working in the clusters provides commercial benefits.

According to the statements of the clusters' representatives a positive factor for the cluster development in Latvia is the opportunity to increase competitiveness, boost innovation, ensure export growth of the cluster companies and to receive co-financing in the framework of programs supported by the EU Funds and other financial instruments. Furthermore working in the clusters provides opportunity to the Latvian clusters' companies to establish and maintain local and international contacts, change experience between one cluster companies and different clusters as well carry out common international marketing activities. The experts of the Ministry of Economics suggest to the Latvian clusters to join together for finding new business niches.

Referring to the researchers mentioned in the theoretical part of this research paper, e.g. Waits (2000), Sölvell (2009), Rosenfeld (1997) the public authorities should support clusters' connection building with other clusters and regions. With the purpose to provide excess to the information on the existing clusters and clusters' companies as result to facilitate collaboration between clusters, in some countries, e.g. in Germany and Austria a common clusters' internet portal was developed. According to the information provided by the experts of the Ministry of Economics in Latvia a common clusters' internet portal with the information on all Latvian clusters has not been developed yet and at the moment it is not planned to develop it.

Table 1

**Positive factors and general barriers for cluster growth in Latvia**

<i>Positive factors for clusters growth</i>	<i>General barriers for clusters growth</i>
Opportunity to increase competitiveness	Shortage of financing for development of the regional clusters
Opportunity to boost innovation	Society and Latvian firms have little understanding of the business cluster and its positive impact
Opportunity to ensure export growth of the cluster companies	Insufficient state support for the cluster international integration and cooperation
Opportunity to attract co-financing	Insufficient state investment in innovation and research
Opportunity to establish and maintain local and international contacts	Bureaucratic burdens and political lobby for the large state companies
Opportunity to exchange experience between one cluster companies and different clusters	Lack of collaboration skills between Latvian companies
Common international marketing activities	Incomprehension that working in the cluster provides commercial benefits

*Source: compiled by the authors based on the research results*

According to the European Cluster Memorandum (2007), Porter (1990) and Sölvell (2009) effective government cluster policies should support cooperation between different groups influencing clusters performance, e.g. cluster companies, government agencies, research and educational institutions as well promote transnational cooperation between clusters. The experts of the Ministry of Economic of Latvia point out that several programs co-financed by ERDF and European Social Fund besides the Cluster program indirectly promote cooperation between local companies, clusters, research and finance institutions, e.g. the programs “Support to training for employed in partnership” and “Competence centers”. In the Baltic Sea region the trans-national cooperation in five fields is supported in the framework of StarDust project.

Nevertheless, the majority of the clusters’ representatives participating in the survey consider that the state support for the promotion of the transnational cooperation between clusters and cooperation between local clusters, research and finance institutions is rather weak (Figure 3). On their opinion additional state programs should be created for the promotion of this cooperation.

By analyzing the Latvian strategic documents the Sustainable Development Strategy of Latvia until 2030 and the National Development Plan of Latvia for 2014-2020, as well according to the information provided by the experts of the Ministry of Economics, it is to note that clusters’ development in Latvia is not considered as the primary goal but rather as a tool for achievement of certain goals such as export promoting, innovation boosting and development of creative culture.

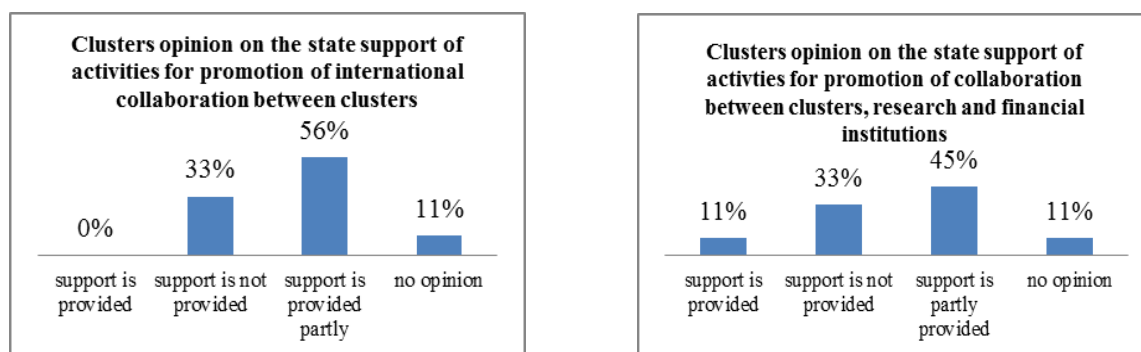


Figure 3. Clusters opinion on the state support of activities for collaboration promotion

*Source: survey conducted by the authors*



## 5. RECOMMENDATIONS FOR THE IMPROVEMENT OF CLUSTER DEVELOPMENT POLICY IN LATVIA

Analyzing the survey results with the Latvian clusters' representatives and taking into account the information provided by the experts of the Ministry of Economics during the interview the authors of this research paper propose following recommendations for the improvement of cluster development policy in Latvia.

With the purpose to promote new clusters' emerging and growth of existing clusters it is important to elaborate clear and long-term programs and action plan for the clusters development and support in Latvia involving clusters leaders. By developing of long-term cluster development program it is advisable to take into account the experience in cluster development of the European countries and to choose the better solutions and initiatives for Latvia.

For better regional development and growth, especially of weak developed Latvian regions, the authors of this research paper suggest to the Ministry of Economics of Latvia to elaborate cluster support program with focus on cluster initiatives in regions.

The authors of this research paper recommend to the Ministry of Economics of Latvia to develop a common clusters' internet portal with information on all Latvian clusters, possible support programs for cluster activities and other important information concerning clusters' development. The German webpages for business clusters: <http://www.go-cluster.de> and [www.clusterplattform.de](http://www.clusterplattform.de) administrated by the Federal Ministry of Economics and Technology and by the Federal Ministry of Education and Research as well the Austrian webpage <http://www.clusterplattform.at> administrated by the Federal Ministry of Economy, Family and Youth could be taken as a model for Latvian clusters' webpage.

It is important to improve cooperation between public authorities and Latvian clusters. Therefore it is advisable to the Ministry of Economics in cooperation with the Investment and Development Agency of Latvia to organize regularly, for example, ones in six month the meeting with the management of all clusters (and not only with clusters supported by the ERDF or by other Funds) to discuss on the clusters' problems, providing opportunity to the clusters to communicate with each other for further clusters synergies, provide information to the clusters on possible new supporting cluster activities and involve clusters' management into cluster policy formation.

For further development, reaching of full potential and finding of new business niches it is advisable to the Latvian clusters to join together and to find international partners within the Baltic Sea region.

## 6. CONCLUSIONS

This research paper confirms the topicality of the issues of business clusters' development in Latvia and of cluster policy as a promoting factor for the new clusters' emerging and existing clusters growth. Although in last ten years several dozen clusters initiatives have been launched in Latvia and several support programs co-financed by the ERDF were created directly and indirectly concerning cluster activities, generally the cluster policy in Latvia is poorly developed in comparison with desired state and best practices in Europe.

Findings of this research paper could be useful for cluster policy makers, emerging and existing clusters in Latvia. Realizing and solving problems concerning cluster development mentioned in this research paper will contribute to the growth of existing and emerging of new clusters in Latvia thus strengthening competitiveness and enabling growth of the local companies and of whole economy in general. The authors of this research paper consider that for further cluster development in Latvia the state authorities, e.g. the Ministry of Economics of Latvia in close cooperation with clusters' management should elaborate clusters' development action plan.

Taking into account the topicality of the issue of this research paper further research can focus on the analysis of the clusters' development potential, collaboration possibilities and experience

change between related clusters in the whole Baltic Sea region.

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