

Abrham, Josef; Vosta, Milan; Tesarova, Adela

Conference Paper

Opportunities for Development of Clusters in the Czech Republic

45th Congress of the European Regional Science Association: "Land Use and Water Management in a Sustainable Network Society", 23-27 August 2005, Amsterdam, The Netherlands

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Abrham, Josef; Vosta, Milan; Tesarova, Adela (2005) : Opportunities for Development of Clusters in the Czech Republic, 45th Congress of the European Regional Science Association: "Land Use and Water Management in a Sustainable Network Society", 23-27 August 2005, Amsterdam, The Netherlands, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/117737>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Opportunities for the development of clusters in the Czech Republic

Josef Abrahám, Milan Vošta

University lecturers

University of Economics, Prague

The industrial branches are often found in **geographical concentrations** and generate success from the externalities which result from this: the appearance and development of related branches providing specialised skills and services; creating reservoirs of specialised workers with the skills and know-how necessary for the given branch; spreading ideas, knowledge and technology among firms in that particular branch and creating the atmosphere for innovation and the effective functioning of the industry with a collection of formal and informal working practices, customs and traditions.

Competitiveness depends on geographical localisation, which can be influenced, supported and increased. The new roles for firms, governments and institutions in the efforts to increase competitiveness are covered by the expression „**industrial cluster**“.

Cluster is a geographically close group of mutually linked firms, specialised delivery firms, service providers and associated institutions in the concrete branch, and firms in related branches, which compete together, cooperate, have the same symbols and complement each other.

Cluster as a **group of firms**, unlike certain branches, goes over limits and boundaries and works in other branches and subjects. It is possible to observe the cluster expand in two directions: **vertically**, downwards to distribution and customers; and **horizontally**, sideways to the manufacturers of complementary products and firms ensuring education, qualifications and technology. The deciding factor in the successful development of the cluster is the background of the firms innovative growth, which is created by the research and development institutions. Into the ranks of the clusters are concentrated even state and other institutions (universities, research establishments etc.)

A grouping becomes an industrial cluster if it fulfils the conditions leading to competitiveness in the given place. These conditions which must be fulfilled are contained in the model called „**Porter’s diamond**“. If a cluster is to be competitive it must have all elements of the diamond and must be connected on the net. The competitive advantage of the cluster does not depend only on individual parts of the „diamond“, but in the **whole** diamond.

It concerns the following conditions:

- **Conditions on the access side** include all tangible factors (natural, human & capital resources), climate, information, legal and administrative systems, scientific and technological infrastructure;
- **Firms’ strategies and rivalry** representing local regulations, incentives and norms, which govern the given type and intensity of competition. It encourages investment and modernisation;
- **Conditions on the demand side** must have sophisticated and demanding local customers, who outstrip the local demand, thus creating competitive pressure;
- **Linking and guiding branches** include local sub delivery agents and competitive local firms in related branches.

The cluster strategy offers, from the point of view of **economic development**, a whole host of opportunities. Clusters create the conditions necessary for the stimulation of innovation and the more efficient use of research and development. It speeds up restructuring and diversification of the branches by the creation of the conditions for the appearance of new firms and increasing the performance of individual firms. Strong clusters generate a milieu which attracts a greater quantity, and quality, of internal investment. Cluster strategies offer a complex strategic programme and integrational framework.

Among the **main advantages** which a well functioning and strong cluster brings to individual firms belong: access to customers and a greater selection of business opportunities, a stable environment with reduced risks, which brings innovation, easier and faster access to knowledge and information, more extensive services and infrastructures,

capability of investing in professional skills and direct access to delivery agents with lower costs for transport, supply and transactions.

Clusters in the Czech republic - Moravian-Silesian industrial cluster

The **Moravian-Silesian industrial cluster (MSIC)** was created on 20th March, 2003 in Ostrava and gained 37 members. It was prepared and constituted by the Assembly For The Development Of The Moravian-Silesian Region. In order to support the cluster, there was created a regional professional workplace in association with the agency Czechinvest. The MSIC was founded as an interest group of legal entities and natural persons. It has an elected president and a nine member executive council. The executive component is the secretariat.

The MSIC includes a significant part of the **traditional manufacturing industry** region, which is undergoing restructuralisation. Among the characteristic features of the cluster are: local resources of raw materials, sufficiency of qualified workers, large exports, sufficient local sub-delivery agents and demanding customers, the presence of specialised services and other allied infrastructures, the existence of growing firms, completed framework of international relations and the potential for foreign investment.

The MSIC cannot ignore global trends and changes, which take place in the regions. The basic aims of the cluster are:

- **To represent and support the interests of the heavy engineering industry in the regions, including the growth of employment and wealth in the region and;**
- **The growth of membership in the basic cluster to the level of 150 members by 2005.**

The objective is the creation of a cluster with international activity, which will, simultaneously support growth of real wages and living standards of the inhabitants and **create opportunities for the emergence of new branches** on the basis of using the contemporary strong sides of the cluster.

The Clusters Development Support in the Czech Republic

The clusters in the Czech Republic represent rather new and little spread tool so far. However, they are a necessary part of a modern regional policy because they improve competitiveness of business subjects, the position of tertiary education institutions as well as they improve other regional participants and contribute to development of the region as a whole. Existing development of the clusters in the Czech Republic is quite low, especially with respect to organised clusters. There are some industries in Czech economy which show features of a natural cluster such as automobile, glass or food industry. Nevertheless, nowadays (march 2004) there is just one organised cluster with a clear organization structure and with a coordination of activities named Moraviansilesian Engineering Cluster.

In connection with the Czech Republic entering the European Union a row of the clusters development supporting activities has been started. These activities are partly financed by a state budget and between years 2004 and 2006 even by the European Union structural funds. The clusters development in the Czech Republic is coordinated by The Ministry of Industry and Trade which has passed responsibility for fulfilment of many processes to the CzechInvest Agency. These processes can be split into two basic groups. The first one contains information, education and consulting processes and the second one is co-financing of clusters activities by The Clusters Programme itself.

Information Resources, Regional Workshops, Facilitators Training

As a basic information resource for cluster mapping and preparation in the Czech Republic is used 'cluster portal', which is placed on the CzechInvest agency web pages – www.czechinvest.org. These pages contain:

- Conditions of The Clusters Programme from which the activities of preparation and development of clusters can be co-financed.
- Examples of working clusters from abroad.
- Czech and foreign expert publications about clusters problems.
- The list of current activities organized by the CzechInvest agency to Czech clusters development support.

Workshops and Facilitators Training

During September 2004 the CzechInvest Agency organised a cycle of workshops in particular regions. In 2005 the CzechInvest Agency is going to arrange another seminars for future clusters participants. In case of interest a group of business subjects in cooperation with the CzechInvest Agency, which will guarantee expert content, can organise a workshop directly in the region.

Organised clusters represent a new instrument in business conditions of the Czech Republic. This is why there is only relatively little amount of experts in the Czech Republic who are able to evaluate potential for upcoming cluster properly. In response to this situation the CzechInvest Agency organised a series of trainings for advisors in the area of clusters last year. These advisors are also called facilitators. The trainings took place in attendance of the experts from The Cluster Navigators company from The New Zealand and they were notably focused on such activities which are connected with cluster formation. This year, in the days of 2 and 3 March, the second round of facilitators training was running. This training was concentrated on cluster formation activities again as well as on activities connected with cluster development.

The Programme Clusters

The most important form of businessmen support is represented by The Clusters Programme, which will be running until the year 2006. This programme is a part of The Operational Programme Industry and Business and thus it is intended just for the projects which are being realized on the area supported under the terms of The Goal 1 of Regional and Structural Politics. It means the whole area of the Czech Republic except Prague.

A subsidy from The Programme Clusters can be utilised in two stages. The first one within mapping of conditions for clusters which is called 'the project of seeking suitable firms for clusters', where the initiators can gain a cover of 75% of costs of the seeking. And the second stage of cluster development which is called 'the project of cluster development' that can cover the activities of cluster such as rental and equipment of offices, market and competition research, cluster promotion, wage and travel costs, benchmarking. The subsidy can be only drawn in the first three years of the cluster operation. 1. year 75% of costs, 2. year 50% of costs, 3. year 25% of costs.

Conditions of The Programme Clusters for the Project of Seeking Suitable Firms for Clusters

The Programme Clusters involves, similarly like other titles of subsidies, a lot of conditions needed for an acquisition of co-financing. To lodge an application at the first stage of the project is necessary :

- to get authorisation of county council as well as approval of firms in the region. The only institutions which can apply within the programme can be either county council, tertial education institutions or research institute. They must have the seat in the Czech Republic. A private firm can apply for the subsidy just in case of county council authorization. The authorization is proved with a regional authority statement. There is also necessary to prove an interest in elaborating studies of at least 10 firms and tertial education institutions. It is always better if county council and research institute express their interest as well.
- to elaborate entry analysis for seeking suitable firms in prescribed structure before the lodging an application.
- to prove financial resources of the project – statutory declaration in case of self-financing. In case of financing from other resources bank credit assurance is needed.

Conditions of The Clusters Programme for the Project of Cluster Development:

To obtain cluster development project subsidy is necessary to meet following conditions:

- an applicant for the subsidy can be only a body corporate founded on innovations support or industry competition increase purpose. An association of body corporates is recommended as the best one
- a cluster has to contain at least 15 independent organizations among them tertial education institution or research institute is included
- at least 60% of members has to be created by small and middle-sized enterprises
- to prove financial resources
- to elaborate a feasibility study properly in prescribed structure (results characteristics and project identification, region analysis including SWOT analysis, organization and cluster structure, description of planned cluster activities, project realization timetable,

description of cluster participants, characteristics of cluster human resources, cluster financial resources, cluster sustainability – cost-benefit analysis calculation, indicators of cluster monitoring)

The Procedure Recommended for Formation of Cluster Co-financed by the European Union Structural Funds

If business subjects decide to gain co-financing from The Clusters Programme it is recommended by authors, in view of the fact that the subsidy is provided in two time stages, to keep following procedure:

1. To peruse information materials, to utilize possibility of participation in workshops, possibly to arrange a workshop in attendance of experts from the CzechInvest Agency, to attend the training of facilitators or to utilize consulting services of an expert clusters facilitator.
2. To elaborate entry analysis of industry and to lodge an application for the subsidy within The Clusters Programme to particular region. The subsidy should finance the project of seeking suitable firms for clusters.
3. To seek suitable firms and to prove vitality of a cluster (discussions with firms, seminars, workshops, SWOT analysis and elaborating a feasibility study).
4. To put in a request for co-financing of activities connected with run of a cluster – a project of formation and development of a cluster.
5. To develop a cluster – development of common cluster activities, foreign cooperation, making strategic alliances, results monitoring and so on. Development of a cluster can be only co-financed by structural funds in the first three years, then just commercial financing follows.

In conclusion is necessary to state that clusters can have relevant contributions to run of business subjects. However, on their formation is important to contemplate if the sector really meets conditions of the cluster and if relations among firms are developed enough. It is known that formation and administration expenses of dysfunctional clusters exceed their contributions. Clusters should not be also developed only on purpose of obtaining structural funds subsidy unless their future

vitality is assured. Cluster formation should be initiated in large measure by private sector.

Bibliography:

Feasibility Study to Identify Industry Groupings in Moravia Silesia for Targeted Aid Scheme Support. Praha : Czechinvest, 2002.

Podpora inovačních a konkurenceschopných podniků v krajích ČR. Návrh klastrové strategie pro období 2005 – 2008. Praha : MPO, 2004.

Průmyslové klastry. Nová strategie zvyšování konkurenceschopnosti firem a regionálního rozvoje. Ostrava, 2003.

Porter, M.: Location, Competition and Economic Development: Local Clusters in a Global Economy. Economic Development Quarterly. Boston : Sage Publications, 2000.

Porter, M.: On Competition – A Harvard Business Review Book. Boston – Harvard Business School Press, 1998.

www.czechinvest.org

www.msunion.cz/dokument (16.2. 2005)