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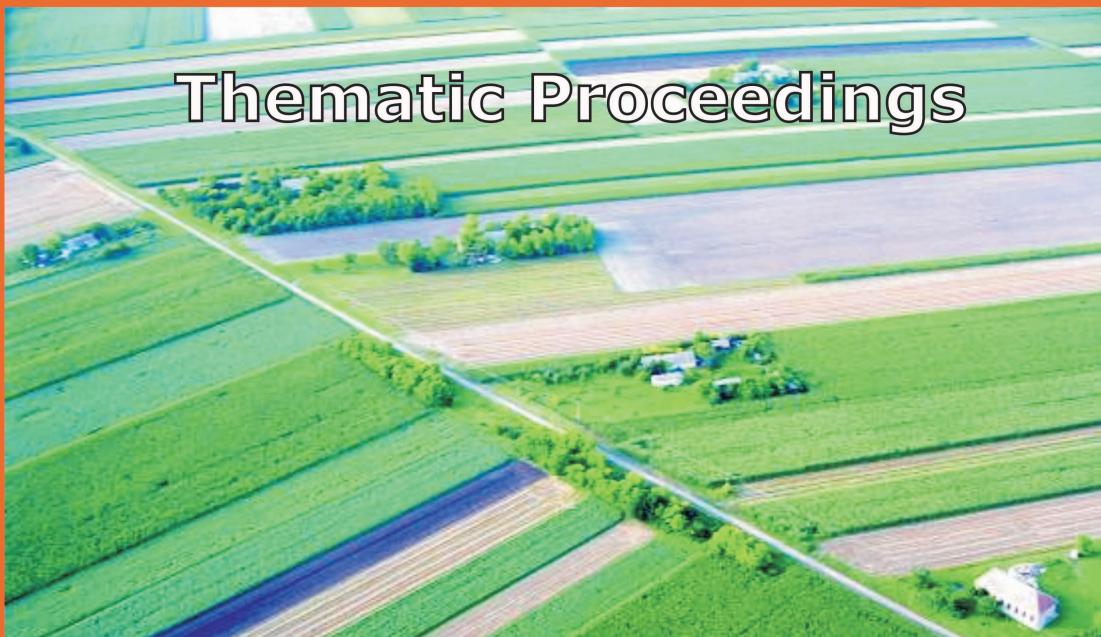
Edited by
Danilo Tomić
Miladin M. Ševarlić

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REGIONAL CLUSTERS IN A FUNCTION OF RURAL DEVELOPMENT IN CROATIA

Tihana Sudarić [1], *Krunoslav Zmaić* [1], *Božidar Petrač* [2]

INTRODUCTION

As a theoretical concept rural development basically deals with a wide range of social and economical problems faced by rural population. The analysis of geographical differences between regions and counties in Croatia indicates big disparities in rural and urban areas. Numerous negative factors characterizing rural areas include, above all, inadequate structure of rural population, steady downward trends of population size, emigration, inadequate structure of rural labour market, low educational level of rural population, high dependence of rural population on social support, poverty, high unemployment rate, connection to infrastructure, etc. Compared with the situation in urban areas, the overall economic situation and welfare of rural population is considerably unfavourable. Large parts of rural areas are faced with economic and social decline. Particularly negative living standard in rural areas has been found in many „high concentrated rural regions" i.e. regions with 90% or more rural population. Implementation of regionalization as a consequence of differently developed regions represents a strategic point in creating a strategy which has two goals: the balance of social-economic diversity and initiative of integral regional development. In last few years clusters have become one of the key terms in numerous developmental initiatives, strategies and policies. As a process of mobilization of regional clusters clusterization can reduce regional disparities of social-economic inequality. Cluster management results in critical mass of information, knowledge and technologies which might enable network of new business activities.

MATERIALS AND METHODS

In order to demonstrate real situation in Croatian counties, this paper uses descriptive methodology for analyzing secondary source data through selected demographical and economical indicators, including GDP p/c, education level,

Tihana Sudarić, MSc, Krunoslav Zmaić, Assistant professor, Faculty of Agriculture in Osijek, Department for Agroeconomics, Trg Sv. Trojstva 3, 31 000 Osijek, Republic of Croatia

[2] Božidar Petrač, Full Professor, Faculty of Economics in Osijek, Gajev trg 7, 31000 Osijek, Republic of Croatia

unemployment rate, income level. In addition to above stated macroeconomics regional analyses, this paper deals with organizational model for cluster connection which encourages investment, communication and new business possibilities aimed to increase welfare and income of rural population. For conceptual framework of regional clusters the most relevant books, journals, international and domestic scientific papers have been used.

REGIONAL AND CLUSTER DEVELOPMENT

Even though the absence of consistent regional politics development of Croatia has been regarded as one of the basic problems, so far there has been no reliable statistic research by internationally accredited methodology aimed to define differences in regional development and at the same time serve as the starting point for its formulation within upcoming integration process (Lovrinčević et al, 2004). Accession to the European Union is an additional factor which impacts the importance of regional politics. In this context it is extremely important to be well prepared for introducing both pre access and structural European Union funds. However, Croatia is not prepared enough in an organizational as well as in an administrational sense because integral regional development of Croatia, which is supposed to represent long term process of improving sustainable economical and social development of some area, has not been regulated yet (Sudarić et al, 2007). It is usually considered that there is a regional problem if a region deviated from the national level in the following:

- High and long term unemployment
- Low level and slow increase of GDPp/c
- High dependence level on narrow industry sector
- Rapid production fall
- Inadequate infrastructure equipment
- High migration, etc.

Influenced by slow decrease of total unemployment and at the same time increase of total employment rate, the registered annual unemployment rate slightly decreased from 18.4% in 2004 to 17.9% in 2005. There are significant differences in **unemployment** regional analysis review. In December 2005, the average state unemployment rate was 17.1%. At the same time it was lower in eight counties, while in thirteen counties it was higher than the average state level. The lowest unemployment rate was recorded in City of Zagreb (7.8%) and the County of Istra (8.0%), and the highest in the County of Vukovar - Srijem (32.1%). Compared with previous year, unemployment rate has been decreased in 12 counties while the highest decline was recorded in County of Šibenik - Knin (2.6%), County of

Vukovar - Srijem (1.9%) and County of Zadar (1.9%). At the same time unemployment rate was increased in only two counties: the County of Bjelovar - Bilogora (by 0.5%) and the County of Virovitica - Podravina (by 0.1%). The most unfavourable **demographical** situation is in Lika, Gorski Kotar and Eastern Slavonia, while the most favourable situation is in the County of Virovitica - Podravina and the County of Šibenik - Knin. By analyzing **fiscal capacity** of different counties, the County of Zagreb takes the leading position, followed by the County of Dubrovnik - Neretva, the County of Primorje - Gorski Kotar, the County of Istra and the County of Zadar. These counties, „the followers", are characterized by tourist features respectively, i.e. the fact than fluent income per capita is significantly higher in coast counties. It is necessary to analyze differences according to the basic macroeconomics indicator - GDB p/c. Ranging counties by the gross domestic product *per capita*, it is noticed that only two counties, City of Zagreb (19.125 USD/pc) and Istarska county (9.147 USD/pc), are ranged above average, which accounts for 6.305 USD/pc for Croatia. The last position takes the County of Sisak - Moslavina with only 1.045 GDPp/c, the County of Lika - Senj, the County of Vukovar - Srijem, the County of Brod - Posavina and many others. It is important to notice big dispersion and great regional differences from 19.125 GDP/pc in the City of Zagreb to 1.045 GDP/pc in the County of Sisak - Moslavina. The further significant regional development indicator - **educational level of population** - confirms similar situation. The most favourable education structure is recorded in City of Zagreb with 16.6% of high education people older than 15 years, followed by the County of Primorje - Gorski Kotar with 9.8%, the County of Split - Dalmatia with 8.4%, and finally the County of Dubrovnik - Neretva with 8.1%. Under average values are recorded in all other counties, while the most unfavourable situation is recorded in the County of Krapina - Zagorje with 3.2% of high education people.

In order to decrease gap between counties development and at the same time approach the European Union, public and private sector must match with number of legislations, standards and implementation activities. The whole range of procedures is related to European Union aim in achieving balanced regional development. Therefore the *Regional operative plans* by counties are built and supported in order to influence better and faster regionalization of the whole country. The purposes of *Regional operative plans* are to prepare Croatia for accession and successful use of structural resources of European Union. In order to give analysis and determination of economic level of the country in the whole, or on regional level, the European Union applies NUTS system. This harmonized statistical system provides collection and processing of comparable data, but it also forms and stimulates regional politics implementation through controlling measures and their effect on development. *The Nomenclature of Territorial Units for Statistics* - NUTS is European Unions hierarchical territory system within

national, regional and administrative countries' borders. NUTS is used as statistical base for collecting, harmonizing and promoting of regional statistics within European Union. As a candidate country, Croatia defines its so called statistical regions which will become NUTS regions once Croatia joins EU. Current Croatian administration division meets EUROSTAT criteria on the NUTS I level (Croatia in the whole) and the NUTS III level (counties). However, until very recently administration division for the NUTS II i.e. statistical regionalization has not existed at all. Following numerous efforts and propositions, in April 2007, *State department for Croatian statistics* made and suggested to EUROSTAT new Croatian division on three statistical regions:

- **Adriatic region -** the County of Primorje - Gorski Kotar, the County of Lika - Senj, the County of Zadar, the County of Šibenik - Knin, the County of Split-Dalmatia, the County of Istria and the County of Dubrovnik - Neretva.

- **Panonian region -** the County of Virovitica - Podravina, the County of Požega - Slavonija, the County of Slavonski Brod - Posavina, the County of Osijek - Baranja, the County of Vukovar - Srijem, the County of Sisak - Moslavina, the County of Bjelovar - Bilogora and the County of Karlovac.

- **North-West region** - the County of Zagreb, the County of Međimurje, the County of Varaždin, the County of Krapina - Zagorje, the County of Koprivnica - Križevci and City of Zagreb.

This Croatian regionalization on the NUTS II level is based on three bases criteria - population number, maximal financial effect for structural fund in a long term period and homogeneity criteria of some specific regions. By this new statistical Croatian regionalization all criteria are met and the new division was accepted by EUROSTAT. From the above mentioned, it can be concluded that Croatia started resolving regional disparities, particularly through ROP programs, i.e. applying bottom-up method. Collecting data on local level and analyzing situation of a specific area i.e. specific county, aims and priorities are defined in order to frame regional county value. But, further development of some regions will depend on partners' relationship, cluster development, which will activate network of existing business entities as well as innovation activities directed to increase dynamics of economics growth and balanced regional development.

CONCEPTUAL FRAMEWORK OF REGIONAL CLUSTER

Although counties represent territorial and administrative base for Croatian development, capacities for managing development process on this level are not strong enough, varying from county to county. Establishing strong institutional structure, partner promotion, shared responsibilities as well as stronger coordination and cooperation will provide the establishment of the necessary

development capacity as a long-term value. Regional clusters will contribute in development capacity through vertical integration by decreasing transaction costs, local market specialization, establishing some new informal roles and habits. It is for this reason that the interest for clusters has increased recently. Clusters represent the way of action and not only description of economic activity. Hence, in order to put regional cluster in action, a number of measures are necessary - short-term, medium-term and long-term on the national as well as regional level. Priorities steps are shown in Figure 1 as four basic elements of necessary activities for regional cluster initiation and application. Above all, it is necessary to establish *Scientific management for cluster development* in order to identify priority sector & location for cluster development and to make potential areas analysis for cluster development as well as to organize development of those areas. In cooperation with other experts scientific management also needs to apply necessary measures and make an analysis to identify priority sectors and sector & location for cluster development.
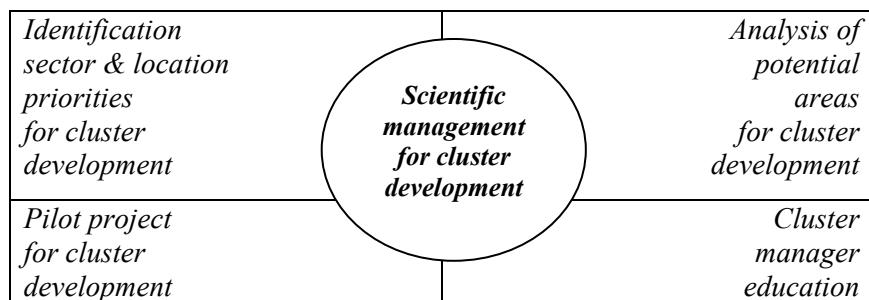

Figure 1 Activity of Scientific management for cluster development

Cluster development requires an educational process which will provide new skill development as well as different ways of thinking and acting. Through such educational process it is possible to set up a training project for cluster manager/network brokerage if we take into account that cluster development process requires specific skills.

Although theoretical cluster concept appears in Marshall and further agglomeration theory, interaction between society and industry is set up as a basic element for regional cluster development. The significance of numerous theories is not questionable, but Michael E. Porter's concept which defines regional clusters as *"geographically directed group's and its complementary interaction between entities and institutions"* has been generally accepted.

Clusters are important because they allow business entities to become not only more productive and innovative but they also help new business activities decrease barriers for entering. The cluster developed on some location depends on business environment. As *cluster* is a broad term, Porter introduced „diamante" in 1990 as analytic tool for business environmental explanation. Diamante consists of four elements:

1. productivity factors - physical infrastructure, skills, etc.
2. demand condition - sophistication of local consumers, production and consumers regulation etc.
3. competitiveness - taxation structure, legislation about competitiveness, strategies of local companies etc.
4. industry - attendance of suitable supported industries

These inter-connected elements have impact on companies and clusters. They show system effect where the weakest element has always the strongest effect on total quality. Diamante can be used for analyzing general quality of business environment on regional and national level. It is important to point out that *the government* has a special role on all four diamante elements. The government is responsible for infrastructure, defining rules and regulation which affect competitiveness and demand. According to Porter different types of institutional connections are also important because they make special interaction base between clusters participants allowing disposable knowledge flow and organization of common activities by whole participants. The most frequent include networks and different kinds of business and public sector of open form cooperation. Companies and institutions connected in clusters have 4 basic characteristics:

- close location - all participants need to be located close enough
- mutual connection - activities must share the same common aim
- interaction - activity of participants
- critical mass - enough number of participants which will have significant influence on business of economic entities

Significance of location and its context has increased for many entrepreneurialships. In global economy location is one of differentiation source between competitors, which can not be simply copied. On a more global level more and more companies are trying to explore cluster possibilities and advantages and many participants realize that their active contribution in efforts for stronger local cluster is becoming an important part of their role. There are numerous forms of connection between economy and public sector in Croatia. Cooperation, association, business incubators, entrepreneurialship zones, to name just a few activities result from the need but also from the counties' initiatives. Some possibilities for forming industrial district in four counties free zones have emerged

- Bjelovar - Bilogora County, Lika - Senj County, the County of Varaždin and in the County of Primorje - Goraski Kotar. Different kinds of economic fields are supported, such as wood industry, metal-processing industry in Bjelovar - Bilogora County, leather and footwear industry in the County of Varaždin. Those districts have positive business, but how successful they are depends on the establishment and users. Although those free zones can have very successful business they are not eternal. After Croatia has joined European Union, their time may be limited. However, free zones as well as business incubators might be one of the positive connection directed on further forming of regional clusters.

CONCLUSION

Defining regions and regionalization principles in economic theory and economics politics is a question of strategic importance. This is confirmed by numerous efforts and suggestions for Croatian division on regions. Regional analysis of macro-economical indicators presented in the first part of the paper indicates that transitional period has resulted in increasing economic differences in some counties. Through "new born" Croatian regionalization on three statistical regions: Adriatic, Panonian and West-North region efforts will be made to balance economic and social environment. Adriatic region has approximately 50% GDP from EU27, Panonian region 36%GDP, while West North region has 66% GDP. According to these indicators Croatia has qualified for structural European Union funds. Utilization of structural European Union funds as well as applying organization model of cluster connection will encourage investment, communication, considering new business dimension, i.e. opportunities aimed to increase welfare and income of rural population. Clusters should be a part of wider concept competition development because they represent a part of the effort to integrate clusters and regional development. Through combination of integration initiatives with connections and clustering successful efforts of competition development will lead to progress. For this reason it is necessary to develop supporting politics for cluster development in Croatia. Cluster strategy should start as mapping in order to identify local and regional competitive advantage. Mapping is a benchmarking instrument of industry & sectors and identification of industrial trends. Clusters are important measure for identifying the trends and forming industry politics. Supporting cluster development brings competition increase and innovation while participants of clusters are better prepared to face international competitors, due to common learning process and competition which facilitate the speed of process and product innovation. Clusters have been mentioned in *National strategy for Croatian development* and through *Regional operative plans* by counties, but it is necessary to integrate cluster approach in design and implementation of regional and local development politics. Regional diversity and

wealth of different regional specifics have not been followed and researched enough, although it is these elements that enable successful economy and faster development reflecting on the whole rural areas (Deže et al, 2002). For all examples and reasons stated in this paper Croatia needs to be introduced in clasterization process as soon as possible, particularly some regions analyzed in this paper.

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