

4 REGIONAL –SPATIAL PLANNING AND THE EFFECTS OF NETWORKING

Tamás Tóth¹ – György Jóna²⁶

¹Szent István University – University of Debrecen

Introduction

Effective regional management is not accomplishable without adequate and careful consideration and preparation based on stable planning. This chapter is to search for new ways in certain questions of planning to make it simpler, more effective and realistic as –according to many authors- different economic and social processes cannot be operated without short or long- term plans relying only on good luck. In the regional development practice of EU member states planning has been appreciated. The practice of a program-centered planning based on analyses has becoming a demand of effective development not only for programs financed by communities but that of a clear, national development policy. Present chapter is describing the theoretical bases of planning respectively economically and socially determining regionalism and the growing role and importance of networks are also being examined. Regional organizations, planning and development are of primary importance for the equalization of regional disparities as local, regional characteristics and features can be considered in this way. In case of underdeveloped regions, however, within local resources cooperation networks among local participants should be considered as a condition for progress and it should be exploited. As mentioned earlier, it will be studied in the second part of this essay.

4.1 Bases for planning and development

Our lives are impacted by social, economic, and environmental processes. As a result, it is most important to call all the readers' attention to the fact that people- since

⁶ György Jóna's research was supported by Bolyai János Research Scholarship.

they became conscious beings, or even before- have always shown interest in their closer and extended environment. We have collected the ideas considered the most important ones relating the active formation of the environment. Consequently, at the very beginning of the book it should be clearly stated that the topics mentioned above are closely related to the changes of our everyday lives influencing everybody and everybody should take part in them. Of course, we can live up to the above mentioned standards if we have enough skills and professional knowledge and this chapter is to help to found and revise this professional knowledge. In most counties there are significant differences in development between urban and rural regions. Rural regions function as locations of agriculture, forestry, aquaculture, and recreation as well as residences. However, compared to urban regions, their population density is much lower, there are less job opportunities and services available. As a result, the quality of living-in spite of the healthier environment- is generally lower than in rural areas. The European Union has never focused on the development of rural areas so much than in the recent years (MISKÓ 2006).

At the end of the 1970s the immanent² difficulties of this profession put the ideas of “classical” regional planning into question. I am convinced that doubts can be eliminated by a more effective planning for the society that means planning itself should be reformed by that it is not examined in an ac hoc way but considered in a system approach of factors that makes the formation of a structural planning process necessary. But let’s not get ahead of ourselves as the concerns above are related to the general crisis of “welfare state”. It seems that Karl Popper, the critical, nationalist social philosopher is right: “All resolved problems produces not only new unresolved ones but we have to realize the fact that things we have considered as stable ones prove to be unstable”. (POPPER 1962).

Evident themes should be forgotten and we have to get back to basics. “the best possible for the most people possible” –according to the standard basic thesis said by Jeremy Bentham (TAYLOR 1980).

Expectations for planning have also been changed. Planning now is more focused on coming to an agreement, moderating the processes of negotiations the effective realization of which is impossible without the planner’s identification with the basic values of the client. The planner is often explicitly expected to promote the

ambitions of the client and the value articulating, lobby skill of the planner may have an important role in the commission.

Decisions are based on CONSCIOUS choice of values generated by interests. Different regional levels and participants represent different things. The interference of the state is coordinated by pre-determined preferences limiting some while supporting others. Politics can agree with “objective knowledge” or neglect it for a while but in the latter case in other channels it can be used even against the prevailing political system. We can detect the planner’s subjectivity in some elements of the planning process but the process as a whole is, like it or not, directed and influenced by interests. All the allocation of resources, the ranking of investments, the creation of new structures need a decision based on the choice of values! In the community sphere most of the decisions are made with reference to “public interest”. But what exactly does “public interest” mean in a representative democracy? Public interest in everyday life means the current political agreement or, in a worse case, the “the will of majority” against a minority. The all-time public interest is determined by the governing political elite and the related economic power and influence.

According to Hankiss E. public interest is the “result of a virtually social consensus” We agree with the fact that a broadly and completely covering social consensus is required at any rate, but its success is uncertain and it is also difficult to name the group of those to be involved in the agreement. Apparently, compromises made by the negotiations can drive away the determined “public interest” from the “unknown optimal”.

In conclusion, for planning a procedure as well as a method of programming and financing are needed allowing a multi-level, transparent and effective use of public money.

4.2 Basic principles of planning

Based on the above written commentary the general principles of planning can be stated. The whole system of planning should be described by:

- **additivity**, that is plans should be based on existing conditions;

- the realization of the theory of **subsidiarity**, namely each plan should be elaborated and accepted at a level where the most knowledge is available to make the right decision
- **hierarchical structure** that means the objectives of plans made for bigger regions should be considered at the making and acceptance of plans for lower levels and smaller regions;
- **the principle of parthnership** that means the agreement of a plan in the most comprehensive way so that it should be well-known by the most people possible to feel it as their own and to be partners in the process of accomplishment. (TÓTH 2005).

When making a concrete plan document the current goals and priorities are to be considered at local level, in a given programming (planning) period. We think that these goals and priorities can be concluded from the interests of those involved, so the first task is to detect them considering the conditions that influence them at present and in the future as well. Then the complex/integrated (strategic) programs required for the accomplishment of the given goals are to be stated and the series of actions (operative programs) needed for the realization along with the application of a continuous monitoring system and the necessary changes.

Accordingly, people and their needs should be in the focus of planning.

Humans are distinguished from other living creatures by their conscious and consciousness. Consciousness means that they can not only remember the past experience but they can consider and plan their future activities as well. The most important human quality is awareness that means we can get away from the present reality and we want another one that is better and more favourable for us. We can imagine a better option and we can consider what to do to realize it, so we can MAKE PLANS. The ability of planning is one of the basic human skills. This ability allowed us to live in settlements, light with bulbs and travel by airplanes (TÓTH 2005).

The aim of planning is to guarantee the social welfare and the promotion of communal prosperity. Of course, it can be the outcome of a very complex process that is often only a cliché and not the consideration of the interests of local people “Planning is a mental preparation for action. It should be tested in the world of ideas

first before realizing it in the physical world. A plan is not only a utopistic scheme, but at the same time it determines the process of accomplishment. Aims and tools must derive from each other to form an integral conception. (...) This kind of planning attempts to harmonize physical, social and economic factors aiming to accomplish an economic, political or technical goal” as Arthur Glikson summarized the main point of regional planning (GLIKSON 1979).

The further we think the less the deterministic effect of the past and present is determining while our freedom in decision-making becomes higher and the factors have to be considered in a more aggregated way. The increase of aggregation is a guarantee against the vagueness of details but this is why we can not say anything for sure about the details so it is difficult to create a program on it. From the future options we have to choose the optimal ones and those to be avoided. For an ideal future it is not enough to create a program but we have to determine those to be avoided in the future.

At different regional levels and in the minds of their participants there may be spontaneous images about the future that can form and influence each other but the outer and inner future image network can not automatically result in a current future prospect. This means that all the inner and outer inspiration should be interpreted as inspirations and the future image should be based on them. In the past few years the central method of the development of future prospects has been formed in the European Union. This has become a profession by now. It has also been clear that not only one future prospect should be made, consequently, ideas are always given in forms of alternatives. (TÓTH 2005; GERENCSÉR – TÓTH 2017). According to SZÖRENYINÉ (2005) the development strategies of the 21th century can not be made based on the models of economic growth of the 20th century. The usual development policies should be changed for an integrated strategic mentality and activity of environment and development.

Sustainable production and consumption means using goods and services that makes the satisfaction of basic needs, the improvement of the quality of life, the using of natural resources, the minimization of poisonous materials, rubbish and the emission of other harmful pollutants possible within a given life cycle so they would not endanger the satisfaction of needs of future generations. (SIMAI 2001). The

objective of sustainable regional development is to improve the quality of life and to provide equal opportunities for those living in regional areas by the balance of an economic, social and environmental sustainability as a result of which the formed future prospect is to aim to improve the quality of life (SZÖRÉNYINÉ 2005).

4.3 Spatial planning

Within our direct and indirect economic and social environment only change can be considered as the only stable factor. Different factors continuously change influencing our daily lives at local and global scales as well. In parallel to changes, in developed or less developed regions, settlements-except for spontaneously changing spaces- these changes are influenced and generated by participants related to regional policy, rural policy and, among others, to different sectoral policies. On the basis of the European practice “ the desirable, regional (spatial) development was realized by the coordination resulting in the harmonization of sectors and regional development policies reflecting a regional harmony instead of a compensating and correcting – also being as an independent sector- regional development” (SALAMIN-PÉTI-CZIRA 2005, SALAMIN-PÉTI 2005).



Figure 17: The European Modell of Spatial Planning (TEM)

Source: (SALAMIN 2018)

After a thorough analysis of the issues in his study SALAMIN states that connected to the theoretical context of the European literature spatial planning is considered as the

formation of a conscious and future-oriented geographical space and he constructed the European Modell of Spatial Planning (Figure 17). We also find his theory professionally crystal clear saying that in the modell the directions of changes form five dimensions. His theories can be summarized as follows:

1. The strongest European effects that are often the first consequences mean that **the European aims and topics** are involved in national, regional and local as well as integrated plans.
2. **A more comprenesive spatial forming policy framework** emerges in national planning systems involving the forms of regional and urban planning of traditionally different tools and attitudes and the coordination of different sectors influencing spatial development is becoming focused.
3. **New spaces are formed** as subjects and frames for planning (e.g. urban region or different ways of transborder collaboration).
4. **The applied tools of spatial planning changes and extend.** Instead of hard tools (regulation) different soft tools (strategis, visions, partnerships) are becoming focused as well as the integrated ones.
5. **The basic characteristics of planning process change,** instead of professional plan-making, spatial coordination and cooperation are becoming focused with a wider circle of participants of planning. The planning has new, so-called “governance” forms. (SALAMIN 2018).

Also, we have to accept the fact that the equivalent of spatial planning in European sense does not exist in Hungarian practice, even in literature there are only indirect references to it. According to the comprehensive “umbrella interpretation” of spatial planning different issues (urban planning, spatial development and planning, some issues of rural development, regional programming and monitoring, planning of traffic networks) have become focused.

In Hungary the planning processes of spatial dimensions are really disintegrated but the national activities can be connected to the European conception of spatial planning. (Figure 18).

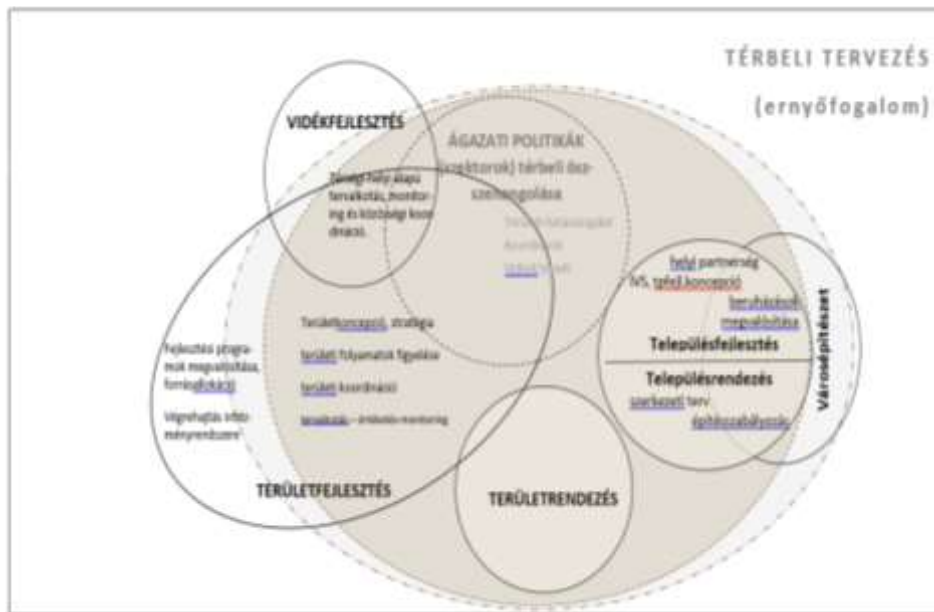


Figure 18: The relation of spatial planning as “umbrella theory” to the theories of Hungarian practice.

Source: (SALAMIN 2018)

4.4 Economic stability

The natural condition for the development of settlements is economic development reflected in the GDP per capita (consumer parity) but it has to be stated that GDP is a growth index that can not reflect any development as, approved by many, development is a quality change while growth is a quantity one. Considering these characteristics the significant and shocking disparities in the GDP per capita among the countries of the world can be seen below (Figure 19).

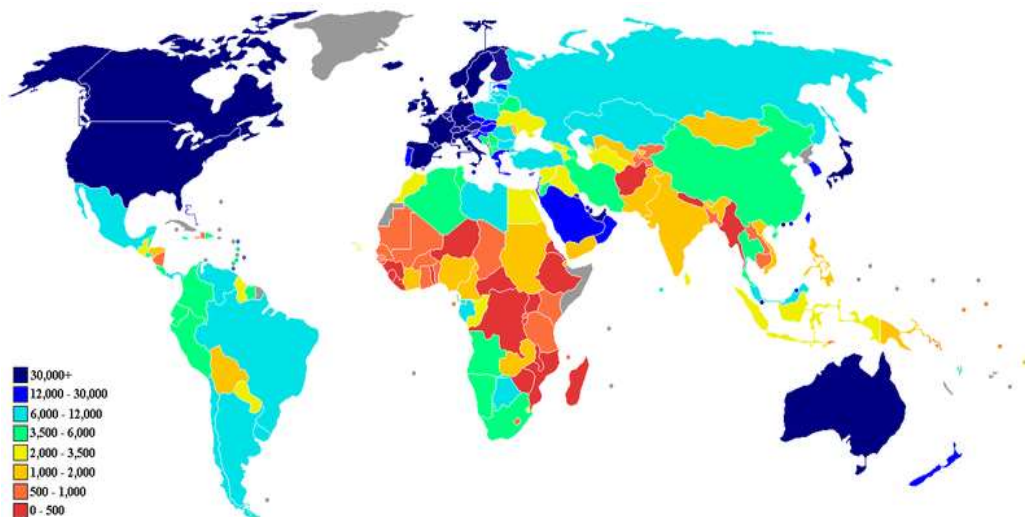


Figure 19: GDP per capita in the countries of the world

Source: IMF, 2015

The difference in GDP may be even more hundredfold among different countries considering the fact that it reflects only a general GDP, however, within a country disparities can be even more hundredfold. At the territories where warm colours (red, yellow, etc) dominate the situation is quite grave and the lack of economic performance has very negative social, health and welfare consequences regarding the fact that GDP is a growth index with several deficiencies. Analysing the situation in Hungary it is quite similar, however, there are no such extremes as it can be seen at world scale.

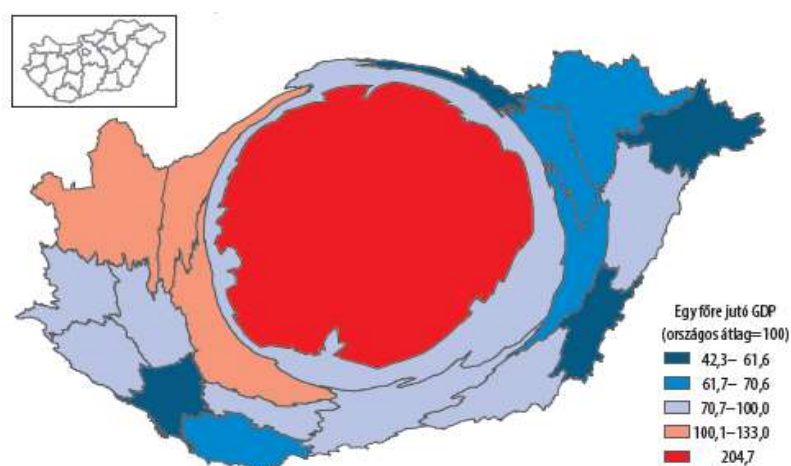


Figure 20: GDP per capita per national percentage, 2015 (the territory of counties are proportionate to the absolute value of GDP)

Source: KSH Tér-Kép, 2016 (2018)

The territories of counties proportioned to the absolute value of GDP quite effectively demonstrate real economic disparities. Sadly, these disparities are also reflected in social differences generated by them sharing similar characteristics. Processes considered as bases for an effective economic development are to be interpreted within this frame system. These huge differences confront countries as well as the leadership of settlements with big challenges. Not speaking of the fact that we talk about settlements of different sizes, so disparities among them may be an order of magnitude bigger. Many state that the population of the world will have reached 9 milliard by 2050. The majority of people will be crammed in megalopolises and complex development policies are to be applied that are far beyond the size of different countries. Megalopolises with a population of 30-40, or even 50 million people are to be supplied and operated on the long run. It has been empirically proven that in developed industrial countries the gross national income (GNI) has increased significantly in the past 30-50 years while the general satisfaction and welfare of people has remained almost unchanged.

4.5 The analysis of the changes of settlement indices (economy)

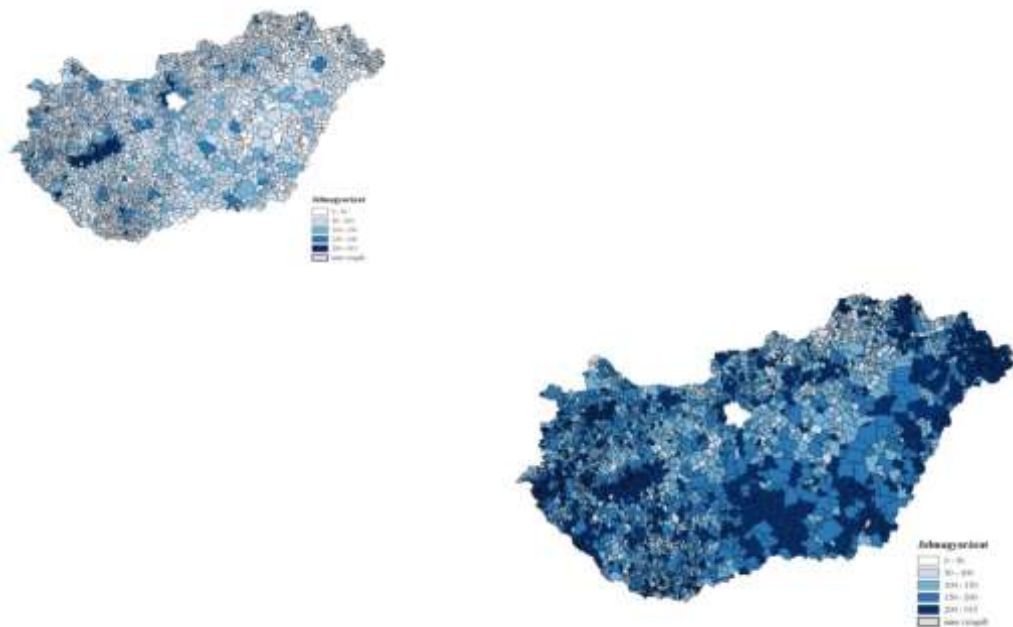


Figure 21: The number of registered economic organizations per 1000 inhabitants - GFO'14 (pcs) 2005., 2016.

Source: based on KSH (Hungarian Central Statistical Office) data, own editing 2018.

Studying the number of economic organizations per 1000 people the huge changes they have undergone in the past 11 years can be clearly seen (unlike the normal routine we analyzed the years of 2005 and 2016). (Figure 21). During this period there has been a significant increase in the number of registered economic organizations at national scale based on the data of the Hungarial Central Statistical Office. Only one or two settlements have not been involved in this process in the whole county. Actually, the increase of the number of economic organizations does not definitely result in a more effective economy. We suppose that in the middle of the analyzed period our country was hit by the econonnic crisis that led to the transformation of different economic organizations respectively several governmental and EU subsidies have helped the establishment and operation of economic organizations lately. Among others, the administration and tax rules have changed related to the operation of several organizations that can stimulate the operation and formation of such organizations or even the termination of them. Following the crises, after an economic recovery new companies and enterprises were established and a stable EU fund has also strengthened these processes.

The registered unemployed per 1000 inhabitants given unemployment benefit involves former employees registered by the Labour Offices and, in an optimal case, are given financial support for a short time to be helped to return the labour market. The indices of years 2009 and 2016 have been analysed (Figure 22). In 2009 the impacts of the economic crisis could be strongly felt in Hungary that looked up by 2016. Compared to the situation in 2009 the numbers are significantly lower in the map. It can be stated that at settlement levels the situation became much better, with the exception of one or two-mainly tiny- villages which show insignificant development.

The economic quality of a region can be assessed not only by the number and quality of economic organizations or the number and qualification of the labour force but the quality and quantity of the relationship between these organizations and individuals are also determining. As a result, more and more people are specified in networking as well as the increasing role and importance of them. In the supchapter

above the features, formation, operation of networks are studied and the advantages of considering and organizing networks and clusters.

Network is a system in which peaks (or intersections) are connected by edges showing connections. There are four types of networks: (NEWMAN 2003): social networks, information networks, technological networks, and biological networks. The term of complex network first was used in physics where -due to the high number of components and the interactions among them -the operation of the system shows a significantly different pattern from that of the separate units. Simply put, the “a total is more than the total of its components” (KERTÉSZ - VICSEK 2006).

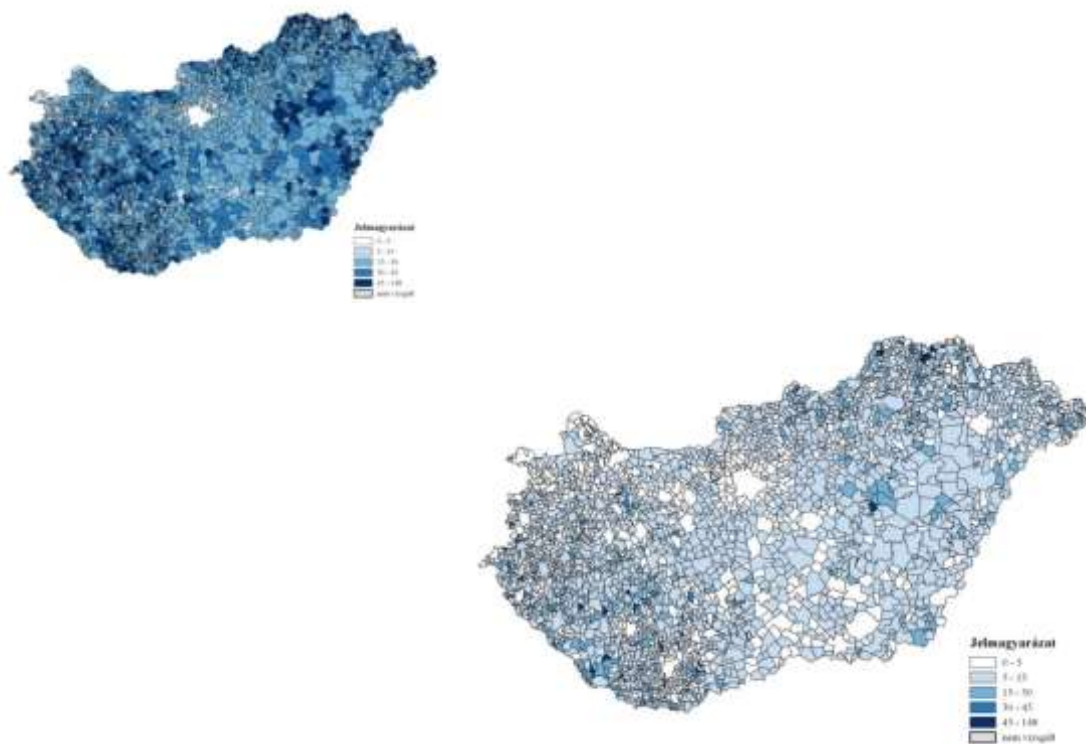


Figure 22: The number of registered unemployed per 1000 inhabitants given unemployment benefit in 2009 and 2016

Source: based on KSH (Hungarian Central Statistical Office) data, own editing 2018.

In the following part of the present study the national and international examples of the practical realization of top-down type cluster policies are going to be described.

Economic networks are in the focus of scientific research projects nowadays. Not surprisingly, as intercompany cooperation activities significantly, directly and

positively affect the local trend of economic development and growth. (JÓNA 2018). There are several forms of economic networks such as strategic alliances, supply chains, regional clusters, local networks, industrial districts (Marshall industrial districts, wheel hub and spoke industrial districts, hybrid industrial districts, satellite industrial districts, Italian industrial districts), and cooperative networks. (see Figure 23).

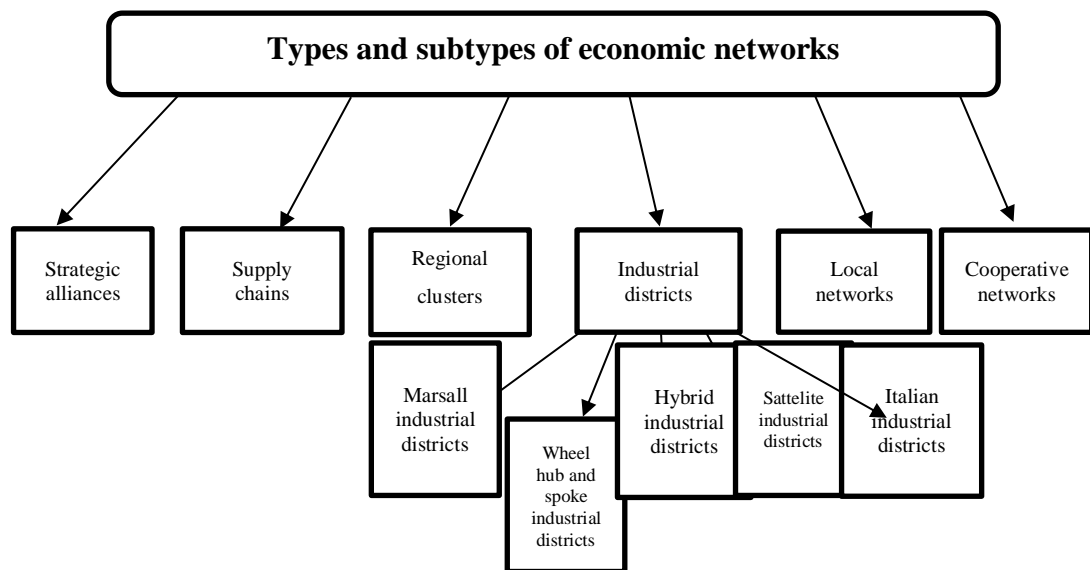


Figure 23: Types and subtypes of economic networks

Source: Jóna 2018.

Companies or enterprises of different sizes are often integrated into business networks as it is more remunerative for them than being outside the network. They are involved in network for solely business reasons while emotional factors like (confidence) are less important.

As business networks are the motors of regional economic development and competitiveness they have to be considered at regional planning as well as the elaboration of development conceptions to strengthen network effects and externalities. At local levels economic development methods and interference opportunities are to be found by which the complex mechanism of action of economic networks can work and affect.

In the present study we can not analyse the regional planning and effects of all types of economic networks, inszead, we focus only on planning and the mechanism

of action of the government-supported cluster policy, namely top-down cluster policy. Cluster is a type of economic network system “a set of independent companies belonging to a certain industry and their business partners as well as the related economic sectors and institutions concentrated in a given region that use each other’s products and services in a relatively high number based on the same knowledge basis and infrastructure and can utilize the same innovations”. (LENGYEL 2010).

Briefly, the theory is based on that if clusters are developed it can provide development opportunities for the participants of economy and society at local levels. The practical realization of a cluster-based economic development and organization can result in a real complex development. We have collected the best national and international practices and case studies of them classifying and presenting them in the followings.

A cluster as a type of economic networks can be formed by grassroots initiatives (bottom-up cluster) and by planning (top-down cluster). The significant difference between the two is summarized in Table 8. Top-down cluster policy is a version of regional planning and programming of some decades. In the rest of the study we are focusing solely on the national and international forms of the latter one.

Traditional top-down development policies	Bottom-up regional development
Regions need interference are decided in national centers	The promotion of development in all regions, often stimulated by grassroots initiatives
Organised by national central administration	Decentralised, vertical cooperation the governments of different regional levels and horizontal cooperation among the body organizations of public and private sectors
Departmental developments	Developments are based on regional aspects (locality, milieu)
Big-scale industrial projects resulting in further economic activities	The utilization of the development potential of all regions is stimulating the adaptation of local economic system to the ever-changing economic environment.
Financial support, stimulation and support of factors attracting economic activities	Assuring key factors for the development of economic activities

Table 8: Traditional top-down and bottom-up development conceptions.

In case of a top-down cluster a given governmental unit creates a formal cluster during regional planning. The aim is to contribute to the increase of profit rate of companies by networks connections, to reduce costs and to increase the added value. This company development has an effect on the society of the region in time. In other words, cluster policy may determine the resources of local welfare in a direct or indirect way. Relating top-down policy there have been many criticism. According to the most common criticism local planning and economic policy based on community intervention restricts and deforms clear market tendencies thus becoming an obstacle of regional economic development. Instead of stimulating it hinders local economic growth. In the followings longitudinal and cross-sectional study cases will disconfirm this criticism so it can be stated that this negative scenario does not describe all regions.

In his study synthetizing quantitative and qualitative methods ARANGUREN et al. (2014) presents that the industrial production of Basque Country dramatically declined at the beginning of the 1990s. As a result the actors of the Basque local government established a cluster. The main objective was to support technology, quality management and internationalization of the members of the cluster. It has been evident that this type of spatial planning was based on a top-down cluster policy. The cluster made up of (1) economic units and companies, (2) local political forces and (3) educational institutions that were directly or indirectly related to local tourism (restaurants, bars, tobacco shops, designers' business, hotels, secondary schools and colleges of trade, etc.). The cluster policy focused on allocating local funds for given purposes to network actors from time to time. It must be highlighted that it was a long-term top-down cluster policy as in the case of cluster the significant development of members was realized only after 2006.

In 2004 a similar top-down cluster policy evolved in Tenerrdisben, France (VERNAY-D'IPPOLITO-PINKSE 2018). The actors of the local government established a cluster involving small and middle-size enterprises (KKV), the universities and research centers nearby, respectively political actors. The local government of Tennerdis supported the development of the relationship and coordination between universities and KKV. The convergence of the two actors was

expected to stimulate the regional economic growth and competitiveness. If there is a clear and continuous interaction between KKV's and higher educational institutions universities provide subjects and impart competitive knowledge to students. The harmonization of the needs of educational system and economic structure took place within cluster policy. The success of the French cluster was due to the size of cluster, its connection and the acceptance of common strategic aims.

The results of NISHIMURA-OKAMURO's (2011) research prove that the Japanese top-down cluster policy has a positive effect on the economic efficiency of the members without causing any market failure. The Japanese cluster policy indirectly supports the research and development economic activities of companies involved in cluster-like networks. More precisely, the departments of the Japanese local government provided a direct financial support to the members of the cluster for years on to finance the tools of information flow, to purchase advisory services as well as to organize programs related to networking. According to the empirical research this all directly and significantly defined the factors of Japanese local welfare.

The study of ISLANKINA-THURNER (2018) proves that nowadays the Russian top-down cluster policy is quite effective in the financial support of the availability of cluster members. Thus the new knowledge and information flow among partners as well as the integration of Russian KKV's into international economic processes is developed. At the same time, a similarly successful top-down cluster policy evolved in Silicon Valley, in the Danish agricultural sector as well as among the New York multi media and web design companies as well. (OKAMURO-NISHIMURA 2015, PUGH 2016, VERNAY-D'IPPOLITO-PINKSE 2018). Although international top-down policy is quite successful, there is also some failure.

In Hungary top-down type cluster policy and cluster development policy have been applied in the past two decades. The most well-known of them is the cluster policy operating within Pólus Program, whose spatial planning took place between 2005 and 2007. The program was launched in 2007 co-invested by the European Union and the Hungarian government.

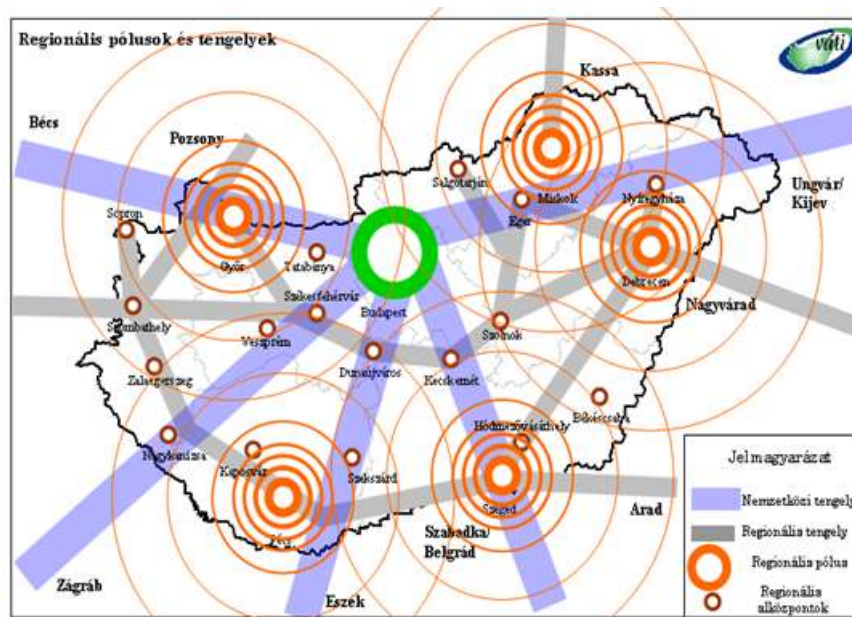


Figure 24: Regional development poles and axes

Source: National Spatial Development Concept 2005.

The work hypothesis of spatial planning was that the cooperation of local governments, companies, chambers and universities/research centers within the cluster network stimulates development first at institutional levels that later extends from pole cities to the neighbouring or even transborder regions as well. In Figure 24 the regional spreading of growth and its mechanism of action can be seen. Within the Hungarian top-down cluster policy first the establishment of an adequate local business environment and the creation and execution of united pole programs were planned. The main point of the conception is that the key figures of pole programs were clusters that were going to realize regional economic development and growth through a complex business development concept.

The planning phase of the national top-down cluster policy was really of high quality, however, the realization of it was only partly successful (VADAS 2010). The members of the cluster themselves criticized the realization process in many cases. Entrepreneurs stated that chambers and local governments were too bureaucratic as they had too much power and too many opportunities to intervene. Furthermore, universities/research centers could not provide any effective solutions to the actors of the economy and entrepreneurs felt that universities failed to stimulate innovations. Surprisingly enough, the influential leaders of the program also criticized the program:

they couldn't even cope with routine problems as they had not adequate information about the competence, functions and tasks of the members of the cluster. The management of the pole program admitted that nobody had given any clear and adequate information about their precise tasks within the network construction. (VADAS 2010).

To sum up, the spatial planning of business networks is extremely relevant nowadays, whose realization is not easy at all. As seen above, there are several international successes proven by empirical research and case studies, however, the national performance is still below this level. The weak points of the Hungarian cluster policy built on a top-down approach are the followings:

- the precise tasks of cluster members were not clear,
- the lines of competence were blurred overlapping each other that generated conflicts among the actors of the network,
- local government had too many coordination functions and opportunities to intervene,
- the relationship among the members of clusters was given but the members had not enough and adequate information to share with each other.

Briefly, the failure of the national top-down cluster policy can be put down to organizational, conceptual and mostly implementation reasons.

Present chapter focuses on the theoretical and empirical relations of spatial planning and development of economic networks. Results clearly show that there is not a sole, widely accepted regional economic development concept including a cluster development policy as the technic of top-down cluster development as well as the direction and intensity of intervention are determined at regional level. (NISHIMURA – OKAMURO 2011, VERNAY–D'IPPOLITO-PINKSE 2018). The past of a region, the general attitude, mentality and traditions of a local society determine what forms of spatial planning including regional economic development can be legitimized and executed. These should be considered even in the planning phase by the actors of economic policy.

It is important to understand that we can not state that a top-down cluster policy is definitely right while the other one is definitely wrong. Actually, all are adequate

and effective: one can work in a region while another one turns out to be ineffective. All regions have their own features, all regions are unique in a special inertial system. We should say that their operations are determined by special external effects and internal processes as well as characteristics. Consequently, solutions are to be given to the arousing problems that, at a certain time and place, can promote a more effective operation and can increase a general social satisfaction.