INTERESTS AND STRATEGIES IN REGIONAL DEVELOPMENT

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Introduction

Hungary is facing new possibilities and challenges in the first years of the new century. Over the last 15 years Hungary has made remarkable progress in transition and it is one of the most advanced countries among the new EU member states with about 80 per cent of economic activity in private hands, a large degree of price liberalisation, an open foreign trade regime and liberal foreign investment conditions. At the same time, the problems of rural development remained important strategic questions for socio-economic development.

According to the classification system of OECD (Organisation of Economic Developed States) more than 96% of Hungarian territory can be considered as rural territory. Here lives approximately 75 % of the total population.

During the last decades the differences among the rural areas have increased rather rapidly, because the foreign direct investments have been concentrated on developed regions. At the same time, the lesser favoured areas could not involve additional resources.

Before the EU accession there were great expectations on effect of EU on regional, and especially a rural development. Three years after the accession it is obvious, that the deep rooted problems of rural development won't be solved only by Brussels. The additional resources from EU will offer only an additional possibility for rural modernisation. We have to take into consideration, that the rural development strategy and practice of European Union is a rather opaque and rather confuse (EU Committee of the Regions, 2005; Bachtler and Michie, 1995; Getinis, 2003; Nemes, 2005).

Under the current conditions of Hungary, the preparation of regional or local development plans gains in importance. This fact highlights the role of wide-range application of sophisticated methods of decision support. The aim of current article is fourfold (1).identification and determination of mutual relationships between different actors of rural development; (2) identification and analyse the different socio-economic goals of actors, relevant in regional development; (3) determination of possibilities of forging coalitions between actors with purpose of promotion of regional development; (4) test the applicability of sophisticated decision support systems in regional development.

Methodology

To analyse the forces, giving framework of analysis of rural development we have applied the organisational (Amin, 2004), as well as the principle-agent theory (Eisenhardt, 1989).

According to the basic theory of so-called "French school of strategy" the different social systems can be considered as an arena, in which different groups of participants (the so-called actors) take part with purpose of enforcement of their specific interests (Godet, 2003). If one can relative adequately simplify the actors and the most characteristic features of their systems of interests, then there is a possibility of analysis the chances of different actors to realise their goals. The possibilities of actors to influence other actors are determined by the power to influence of another actors directly or indirectly, by using their influence on other actors in order to affect their behaviour. That's why the influence of an actor (A) on an another actor (C), is the sum of the direct influence is has on C and of all indirect influences it gains through all the other third actors.

The quantification of mutual influences can be characterised by a rectangular matrix. Cells of matrix -per definition-reflect the intensity of influence of actor in row on actor in column (Bendahan et al., 2004). The intensity of direct influence on an actor to another was measured on a 0-4 scale, from no influence to absolute influence, determining the existence of the respective actor.

Matrix of direct and indirect influences (MIDI [1]), can be quantified for each par of actors as a sum of direct and indirect influences.

$$\mathrm{MIDI}_{a,b} = \mathrm{MID}_{a,b} + \sum_{c}\left(\min\left(\mathrm{MID}_{a,c}, \mathrm{MID}_{c,b}\right)\right) [1]$$

In this way of each and every actor can be determined the vector in influences (Ia) and dependences (Da) by equations [2] and [3].

$$I_a = \sum_b \left(MIDI_{a,b} \right) - MIDI_{a,a} \quad [2]$$

$$D_a = \sum_b \left(MIDI_{b,a} \right) - MIDI_{a,a} \quad [3]$$

Based on these indicators a normalised value can be determined for each of actors. [4].

$$r_a = \left(\frac{\left(I_a - MIDI_{a,a} \right)}{\sum_a \left(I_a \right)} \right) \cdot \left(\frac{I_a}{\left(I_a + D_a \right)} \right) \quad [4]$$

Using the r_a vector one can define the matrix of influence-possibilities of each of actors for different issues. [5].

The importance of different goals from point of view of each actor has been expressed by Matrix of Actor-Object (MAO). In this matrix the importance and attitudes of different goals from point of view of different actors were quantified on a -4 ...+4 scale, where the -4 denoted the high importance and total negation of the given goal, and the +4 denotes the high importance and total support.

$$3MAO_{a,i} = 2MAO_{a,i} \cdot r_a \quad [5]$$

The 3MAO matrix is the basis of most of the analyses proposed by MACTOR. Indeed, a number of important values are directly drawn from the 3MAO matrix. This is the case of the mobilization coefficient [6], showing how much the different actors are involved in the situation, but also of the agreement [7] and disagreement [8] coefficients, which indicate how controversial are the different issues.

$$Mob_a = \sum_i \left| 3MAO_{a,i} \right| \quad [6]$$

$$Ag_i = \sum_a \left(3MAO_{a,i} \cdot \left(3MAO_{a,i} > 0 \right) \right) \quad [7]$$

$$Disag_i = \sum_a \left(3MAO_{a,i} \cdot \left(3MAO_{a,i} < 0 \right) \right) \quad [8]$$

Furthermore, the 3MA0 matrix is used to obtain the convergence matrix (3CAA [9]) and divergence matrix (3DAA [10]). For each couple of actors, these matrixes show how much they agree (respectively disagree) on salient and controlled issues.

$$3CAA_{a,b} = \frac{1}{2} \cdot \sum_i \left(\left(\left| 3MAO_{a,i} \right| + \left| 3MAO_{b,i} \right| \right) \cdot \left(3MAO_{a,i} \cdot 3MAO_{b,i} > 0 \right) \right) \quad [9]$$

$$3DAA_{a,b} = \frac{1}{2} \cdot \sum_i \left(\left(\left| 3MAO_{a,i} \right| + \left| 3MAO_{b,i} \right| \right) \cdot \left(3MAO_{a,i} \cdot 3MAO_{b,i} < 0 \right) \right) \quad [10]$$

Finally, the ambivalence coefficient [11] can be calculated for each actor, giving an indication of their expected stability in their potential alliances.

$$3EQi = 1 - \left[\frac{\left(\sum_k \left\| 3CAAi,k \right| - \left| 3DAAi,k \right\| \right)}{\left(\sum_k \left\| 3CAAi,k \right| + \left| 3DAAi,k \right\| \right)} \right] \quad [11]$$

The different actors, and the two starting matrixes were compiled in a team work, using interactive methods of decision making.

The key actors and their abbreviations are summarised in Table 1

Table 1

The most important actors and their strategic goals

Name of actor	Abbreviation	Name of strategic goal	Abbreviation
municipalities	MUNICIP	increasing of capita-attractiveness	CAPITAL
Hungarian government	HUNGOV	creation and upholding workplaces	WORKPLACE
Regional self-government	REGGOV	Profit-maximalisation	PROFIT

Name of actor	Abbreviation	Name of strategic goal	Abbreviation
County self-government	CONTGOV	profit-regrouping and tax-evasion	TAXEV
citizens	CITIZ	Human resource development	HR
small-and middle-scale non-food entrepr.	SME	Protection of environment	ENVIRON
Agricultural producer	AGRPOD	keeping of budget constraints	BUDGET
Small-and middle-scale food industrial enterprises	SMEAGRIC	increasing of competitiveness	COMPET
Trade and catering SMEs	SERVSME	Improvement of quality of life	UFEQ
Multinational industrial enterprises	MULTI	maximalisation the number of votes	VOTES
Multinational commercial enterprises	MULTCOMM	maximalisation of tax income	TAXMAX
Venture capital	VENTCAP	minimalisation of operational costs	COSTMIN
European Union	EU	maximalisation of subsidies	SUBSID
Infrastructure provider sector	INFRA		
Non-governmental organisations	NGOS		
Educational sector	EDUC		

Analysis of list of principle actors in rural development mirrors the current Hungarian situation, and at the same time the fact, that the participants concentrated rather on economically and socially relevant forces of rural development, than on formal categorisation of different entities.

The different actors of public administration were grouped in four categories: municipalities, county -level self governments, regional self - governments and the central Hungarian government. This fact can be explained by historic development of public administration system in Hungary. As a consequence of rather scattered structure of settlements there are 3152 municipalities. These municipalities have a wide range of autonomy. This is a possible consequence of often rather overhasty legislation of years of transition. The traditional centre of public administration in Hungary was the county. Hungary is divided into 19 counties. This structure yielded a rather fragmented system. This system has been intensively debated from the middle of 20th century, but the inertia of the administration was too intensive to change. The fragmented public adminis-

trative system contradicted to the European standards, too. That's why the regions were formed. There are seven regions in Hungary, embracing 3 or 4 counties.

The self-governments of counties as well as regions do not have a considerable role in re-allocation of resources.

For practical purposes the trade and catering - related small and middle-scale enterprises formed a separate group of actors.

The concept "venture capital" embraces a wide range of potential (domestic or foreign) investors, who are -at least in theory- invest into the projects, which could contribute to the rural development. In Hungary this venture capital has plaid a considerable role in rural development e.g. by renovation of ancient castles, or development of health -tourism, based on thermal waters.

The infrastructure service providers compress a wide range of enterprises, from garbage collection to the public transport systems.

The influence-dependence matrix of different actors are summarised in Table 2.

Table 2
Matrix of direct influences (explication in the text)

	MUNICIP	HUNGOV	REGGOV	CONTGOV	CITIZ	SME	AGRPOD	SMEAGRIC	SERVSME	MULTI	MULTCOM	VENTCAP	EU	INFRA	NGOS	EDUC
MUNICIP	0	1	1	2	2	2	1	2	2	2	2	2	0	1	0	2
HUNGOV	3	0	1	2	2	2	2	2	3	3	3	2	1	3	0	4
REGGOV	1	1	0	2	1	1	1	1	1	0	0	0	0	0	0	0
CONTGOV	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0
CITIZ	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	1
SME	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0
AGRPOD	1	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0
SMEAGRIC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SERVSME	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MULTI	3	4	3	3	3	2	2	2	0	0	2	0	1	2	1	1
MULTCOMM	3	4	3	3	3	0	4	4	3	3	0	0	1	3	1	0
VENTCAP	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
EU	2	4	1	2	0	1	3	1	1	1	1	0	0	3	0	0
INFRA	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0
NGOS	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
EDUC	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0

Analysis of dependence-influence graph of actor highlights the extremely high level of multinational producer and commercial firms, EU resources and Hungarian government on regional development (Fig. 1). It is obvious, that the civil sphere and the small and middle scale economic entities have a rather limited influence, and at the same time a relatively high level of dependence.

Fig.1
The influence-dependence graph
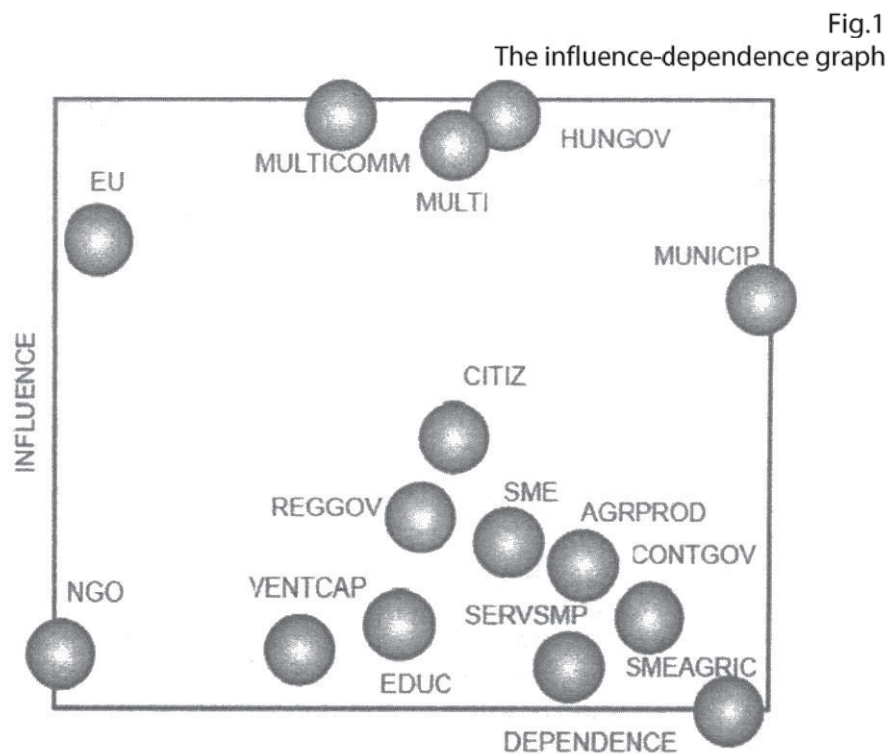
The relation of different actors towards the goals of development are summarised in Table 3.

Table 3
The goals of actors, me sured on a-4... +4 scale

	CAPITAL	WORKPLACE	PROFIT	TAXEV	HR	ENVRON	DUDGET	COMPET	LIFEQ	VOTES	TAXMAX	COSTMIN	SUBSID
MUNICIP	3	4	0	-4	3	4	4	2	2	4	4	4	4
HUNGOV	4	4	0	-4	4	4	4	4	3	4	4	4	4
REGGOV	3	4	0	-4	4	4	4	4	3	2	2	0	4
CONTGOV	3	4	0	-4	4	4	4	4	3	3	2	0	4
CITE	1	4	0	-2	4	2	0	0	4	0	0	-4	2
SME	1	-2	4	4	0	-2	0	4	0	0	-4	-4	4
AGRPOD	0	0	4	4	3	0	0	3	0	0	-3	0	4
SMEAGRIC	0	0	4	4	3	2	0	4	0	0	-4	0	4
SERVSME	0	-1	4	4	3	4	0	4	0	0	-4	0	4
MULTI	4	-4	4	4	4	0	0	4	0	0	-4	0	4
MULTCOMM	0	-4	4	4	3	0	0	3	0	0	-4	0	0
VENTCAP	4	2	4	4	3	0	0	4	0	0	4	0	4
EU	1	2	0	0	2	2	2	2	0	0	0	1	0
INFRA	0	-2	3	0	2	0	4	0	0	0	0	0	4
NGOS	0	0	0	0	3	4	0	0	3	0	0	0	4
EDUC	0	2	0	0	4	1	4	0	0	0	0	0	4

Pieces of information, summarised in Table 3 were further analysed. If we determine the support of different strategic goals, weighted by bargaining power of actors, we see a rather complex picture (Fig. 2)

Fig. 2
The level of acceptance/ rejection of strategic goals investigated
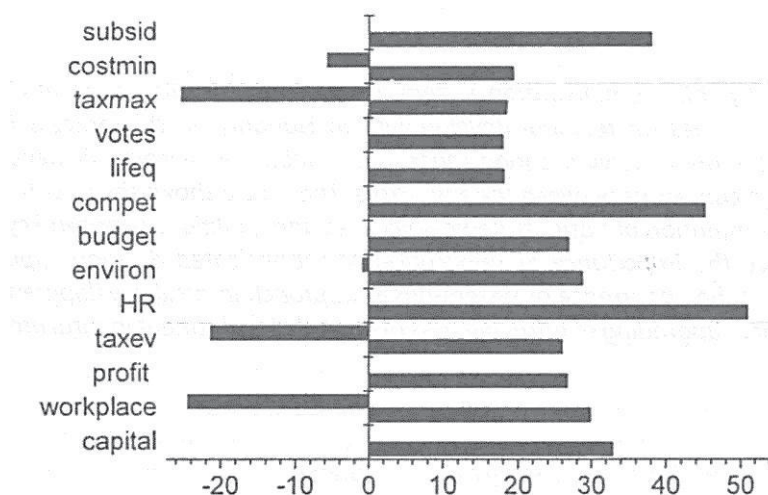
Analysing the goal/structure it can be seen, that the most widely accepted goals of development are the increasing of capital attractiveness, human resource development, increasing of competitiveness as well as maximalisation of subsidies. Acceptance of some goals are high controversial. That's why in our opinion it is a rather risky strategy to trust the rural development on the "spontaneous forces" of free market.

Based on the results of analysis and the experiences of the last fifteen years, the most important lessons to be drown are as follows:

1. At the beginning of system -transition numerous social scientist considered, that the land-privatisation is a means for creation an entrepreneur out of cooperative-members. We have to see that this is an over-simplification. The social and economic influence of agricultural entrepreneurs without cooperatives is rather limited.

2. The "channel-captains" in the food chain are in an increasing way the multinational commercial enterprises. The main problem is the regulation of these economic entities. Without a strong regulation, these organisations will abuse their economic superiority above the another members of food chain, forcing often extremely low producer-prices.

3. Paradoxically, the main lobbyists of multinational enterprises were the municipalities. They got from these firms additional resources (e.g. for road construction), but the real payers were the suppliers of these firms.

4. The low-developed material and human infrastructure as well as service sector is an important hindrance of foreign capital involvement.

5. The tax-evasion an important motivation of private business enterprises. That's why strengthening of economic discipline is a key problem.

Resources

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Summary

The re-structuration of public administration system, increasing decentralisation of decisions and European integration offer new possibilities for regional development in Hungary. In this process it is a factor of crucial importance to determine the goals, serving a long-range, sustainable socio-economic development as well as the formation of a wide -range consensus between the key actors. The article shows the possibilities of application of a multi-actor model for determination of basic strategic objectives and coalitions between key players on example of Hungary. The results prove the importance of application of sophisticated decision support systems, based on collective wisdom; highlight the importance of system-based approach in rural development; and prove the role of info-communication sector in upgrading of attractiveness of capital -involvement in rural areas.