# Triangle Razgrad - Shumen - Targovishte - Balanced Structure Between Urban Centers Rousse and Varna

## MARIA V. SHISHMANOVA

South West University "Neofit Rilski", Blagoevgrad - Bulgaria valkova\_chich@abv.bg

### Abstract

Regional centers Razgrad, Targoviste, Shumen form a local "triangle" of the urban development axis between Varna and Ruse. It is necessary to have in view that the transport direction Targoviste-Shumen-Varna connecting the Danube development axis (Eurocorridor 7) with the Black Sea one is represented as a main axis of urban development with future potentials. Moreover, the "triangle" lies on duplicate urbanization axis international transport corridor 9. The municipality of Shumen could receive and would take advantage of economic impacts of Varna as this town is one of the three international/national important centers in the country. The location of the "triangle" Razgrad-Shumen-Targoviste gives a chance for synergy and in better coordination of the socio-economic development can overcome their current not-so-good condition. They could develop complementary activities and create a strong cluster of production, innovations and attract foreign investments; they could create even compatible high-tech industrial sector using specific local resources. Thus the three municipalities will have possibilities to overcome the high unemployment in these areas and to be promoted as a counterweight to the two strong centers of growth Ruse and Varna.

**Keywords:** Regional centers, socio-economic development, center – periphery, types of municipalities, local models of development

### Introduction

Research on socio-economic and regional development in Bulgaria is an important task for the country because as an equal member of the European Union it must meet all the requirements and signed documents in this field. So many documents were adopted with the prescription period 2000-2006, 2007-2013, and now are prepared for the new period 2014-2020/2025. Continuously ongoing research is done in regions, districts and municipalities. Preliminary, intermediate and final (ex-ante, ex-terme, ex-poste) assessments to current socio-economic and regional development are drawn up and reported what is done and what remains to be achieved in the purposes set out in the documents, vision, goals, priorities and actions. It is looking for the balance between central and peripheral regions, as well as the reduction of peripherals in scope.

### Study area

The survey of the municipalities in the central regions represents an important moment in the establishment of regional policy for the development of these areas, respectively of the periphery around them. It is necessary to use an unified methodology in order to achieve a uniform approach to their future development and to investigate their status at any time – for example their economic and social condition, degree of technical infrastructure, potential of the territory – natural, human and anthropogenic, the viability of municipalities, their vulnerability, competitiveness and attractiveness for investments and innovations Shishmanova M., (2010a). (2010b).

## Methods

The measurement of social-economic differences, competitiveness, attractiveness of the territorial units (TU) in the central regions of Bulgaria – municipalities and agglomeration areas, is realized according to a methodology including double and triple application of the taxonomic method. The essence of the method is following: each TU is represented as a point in an n-dimensional Euclidean space, where designates the number of indicators used. The comparison is made against a fictitious TU which has the highest level of development and is characterized by extreme values of the individual indicators. The closer is the particular TU to the fictitious one, the closer is its place to the top order of classification and the higher is the level of its development.

The evaluation of the level of municipal development is realized by means of verified methodology based on double and triple application of the taxonomic method. First, this method is implemented to determine generalized estimates, characterizing individual aspects of municipal development. The repeated application of the method for the generalized estimates leads to the generation of an integral estimate, characterizing the level of municipal development.

Both the generalized and integral estimates vary within the range from 0 to 1 and values higher than unity may be assumed only for strongly underdeveloped municipalities.

The theoretical ground of the taxonomic method is based on the so-called multidimensional object, and this concept implies a statistical unit defined by a set of characteristics. In regional studies, the territorial communities – municipalities, districts, etc., are assumed to be multidimensional objects. Each multidimensional object is represented as a point in an n-dimensional space, the number of its coordinates coinciding with the number n of the relevant indicators. In this formulation the comparison of the multidimensional objects is made on the basis of the Euclidean distance to a fictitious territorial system called the "reference".

The survey is conducted by examining groups of indicators which are: economic status, social status, construction of technical infrastructure, territory potential (natural, human, anthropogenic), viability territory, vulnerability of the territory. In these groups of indicators covered a total of 42 indicators. The overall socio-economic development, total potential of the territory and the territory attractiveness for investment are examined as integrated indicators. Shishmanova M., (2010c).

This aspect is important for outlining the priorities of the municipalities in their future development and determining the socio-economic and regional development policy.

### Results

Tested by this method there are 87 municipalities forming the central regions in Bulgaria. Totally the municipalities in the country are 264. Other municipalities formed the periphery. This study presents a sample including municipalities Shumen, Novi pasar, Kaspichan, Targoviste, Popovo and Razgrad. Shishmanova M., (2011)

In agglomeration area Shumen – Novi pasar - Kaspichan socio-economic development weakens. Only Shumen passes 2 ranks ahead – it can be said that after fluctuations it signs to enhance socio-economic development. While municipalities of Novi pasar and Kaspichan have been developed in adverse socio-economic conditions and after great swings they take rather back positions respectively from rank 114 to rank 142 for the municipality of Novi pasar and rank 84 to rank 160 for Kaspichan municipality. In this situation their fields of influence contract strongly except Shumen that retains its field of influence, and thus relations between them begin to "loose".

In agglomeration area Targoviste - Popovo, the municipality of Targoviste slightly strengthens its socio-economic status and from rank position 66 in the opening studied period is

ranged in position 53 at the end. During the same period Popovo municipality occupies an intermediate rank in the ranking of 116 municipalities, and by the end of the period loses one rank and occupies rank 117. The field of influence and connections between communities are growing slightly.

Razgrad municipality does not form agglomeration area. Its socio-economic development fluctuates over the period, but as a result it is ranked from 46th ranking position to 65th in the last studied period, i.e. the final result is the significant deterioration of its socio-economic situation.

Fictitious municipality (average for municipalities) to which must be considered analyzed municipalities varies slightly over the period, but in fact, its socio-economic situation has improved from rank 46 in the beginning passing to rank 30 at the end of the studied period.

Considering natural, human and anthropogenic potential municipality of Shumen ranks 16th position out of 38 surveyed municipalities with centers of medium cities. According to the degrees of socio-economic development and of vitality it occupies 8th position. In the vulnerability ranking it takes back seat 35, which means that it is less vulnerable community, and the degree of competitiveness has a very forward position 5.

Table 1 Ratings and rankings characterizing the level of development municipalities for the
period 1996-2006

		1996-1998	1996-1998 1998-2000 2000-2003					2003-2006			
	Municipa- lity	Integral estimate			U	Rank	Integral estimate	Rank			
50	Shumen	0,7566	37	0,7513	57	0,6125	46	0,5477	35		
51	Novi pasar	0,8251	114	0,8652	204	0,7619	17	0,7233	142		
52	Kaspichan	0,8024	84	0,7898	89	0,7553	158	0,7383	160		
66	Targoviste	0,7863	66	0,7849	82	0,6793	88	0,5872	53		
67	Popovo	0,8272	116	0,8150	128	0,7301	129	0,6941	117		
78	Razgrad	0,7683	43	0,7534	58	0,6748	81	0,6089	65		
	Average	0,7687	46	0,6985	34	0,6058	41	0,5293	30		
Information: Institute of Economics, Bulgarian Academy of Sciences 2009											
Yan	Yankova N., G.Shopov N., St. Ivanov, Y. Kirilova (2009										

Municipality of Targoviste has a very strong position in natural, human and anthropoganic potential and ranks third position out of the 38 surveyed municipalities with centers of medium cities, and according to the reached level of socio-economic development occupies the fourth rank position in the 20th degree of vitality out of 51 possible positions. Its 8th rank-vulnerability shows highly vulnerable community. Degree of competitiveness is far ahead in the ranking 7 position. From the three regional centers in question Triangle's Targoviste is the most developed municipality with the greatest chance for future development.

Municipality of Novi pazar, according to nature, human and anthropoganic potential, ranks at 39 out of 51 surveyed municipalities with centers of medium and small cities, and at 32 position for achieved socio-economic development. Degree of vitality ranks it even at reverse 45 position. Degree of vulnerability takes rank 6 that means it is highly vulnerable, but the degree of competition occupies 39th rank significantly lagging behind. These results indicate the need for an active policy of rapid socio-economic development.

Municipality of Kaspichan in natural, human and anthropoganic potential ranks 43rd position out of all 51 surveyed municipalities centered on middle and small towns and 48th position achieved socio-economic development. Degree of vitality ranks even reverse 43th position. Degree of vulnerability takes rank 5, which means it is highly vulnerable, and the

degree of competition occupies 44th rank significantly lagging behind. These results show the need for an active policy of aggressive rapid socio-economic development. Kaspichan compared with the municipality of Novi pazar has even bad results.

Table 2: Characteristics of agglomeration areas Shumen-Novi Pazar-Kaspichan, Targoviste-
Popovo, Razgrad

	ality	Potential natural human anthropoge-nic		Social- economic development		Viability		Vulnerab	ili-ty	Competitive- ness	
	Municipality	Integral estimate	Rank	Generalized estimate	Rank	Generalized estimate	Rank	Integral estimate	Rank	Integral estimate	Rank
13	Shumen	0,5825	16	0,7072	8	0,4571	8	0,8962	35	0,4863	5
14	Novi pasar	0,8188	39	0,8401	32	0,8406	45	0,7185	6	0,7806	39
15	Kaspi- chan	0,8935	43	0,9126	48	0,8287	43	0,7164	5	0,8438	44
34	Targovi- ste	0,4665	3	0,6233	4	0,5505	20	0,7300	8	0,5213	7
35	Popovo	0,5790	15	0,8244	24	0,8095	40	0,8067	16	0,7012	29
41	Rasgrad	0,6385	21	0,7398	9	0,5323	16	0,8524	24	0,7061	31

Municipality of Popovo is significantly more developed municipalities than Novi pazar. According to natural, human and anthropoganic potential it ranks 15th position out of 51 surveyed municipalities centered medium and small cities and 24th position in achieved economic and social development. It occupies 40th position on the degree of vitality of the possible 51 positions and this rank requires a special approach to its future development. Ranking at 16th position of vulnerability means that it is significantly vulnerable community. Degree of competitiveness is far ahead in the ranking - position 7.

Municipality of Razgrad in natural, human and anthropoganic potential ranks 21st position out of 38 surveyed municipalities centered medium cities. Degree of socio-economic development takes 9th position and degree of vitality 16th. Degree of vulnerability occupies lesser rank 24 that means it is vulnerable community, and the degree of competitiveness occupies position 31, which means requirements for a specific approach.

These three municipalities Shumen, Targoviste and Razgrad have to work in "Triangle" and to interact much more convincing in the future. Shishmanova M., (2011)

### Discussions

Shumen occupies the best position in the "Triangle" concerning attractiveness of innovations and foreign investments. This community has very low vulnerability and high competitiveness, making it one of the most attractive in northeastern Bulgaria together with the municipality of Silistra.

Next municipality in the attractiveness of innovation and foreign investment is Targoviste. Its vulnerability is equal to that of the municipalities Novi pazar and Kaspichan but it has better degree of competitiveness. See Fig. 1. Shishmanova M., (2011)

Municipalities of Razgrad, Popovo and Kaspichan have similar level of competitiveness but Razgrad is at the lowest level of vulnerability, followed by Popovo and Kaspichan. Municipalities Razgrad and Shumen have equal vulnerability. See Fig. 1.

	Competitiveness											
0	0,1	0,2 (	),3 0,	4 0	,5	0,6	0,7	0,8	0,9	1,0 1,1		
0,1												
0,2												
0,3 0												
0												
0,4												
0,5												
0,6												
0,0												
0,7					Targovist	Novi p	asar	spich		-		
					e			an				
							-	-				
0,8								Popovo				
								·				
			-									
			Silis-	Shum								
			tra	en				Rasgrad				
0,9								Kasgrau	-	-		
							-					
1,0												
1.0												
1,0												

Fig. 1: Attractiveness Complex and Integral estimate

Said so far leads to the conclusion that the chances of future general socio-economic development of the communities in the "triangle" would achieve a synergistic effect.

	Social-economic development											
	0.0	,1 0,2	0,3 0	,4	0,5	0,		0,8		1,0 1	1,1	
	0,1											
	0,2											
	0,3								-			
	0,4											
	0,4							Shumen				
	0,5					-		Rasgrad				
							Targoviste					
	0,6								-			
	0,7								· · · · · · · · · · · · · · · · · · ·			
	0,8							-	Popovo Novi pasar	Kaspi- chan		
Vi bility	0,9											-
Vi ł	1,0											

*Fig. 2: Attractiveness Complex and Integral estimate* 

Considering the level reached in complex socio-economic development and vitality level of all studied municipalities Shumen has the best position again, followed by Razgrad and Targoviste, and after that followed by the group of municipalities Popovo, Novi pasar and Kaspichan. See Fig. 2.

This result confirms that the municipalities – centers of the district, are the core of the "triangle" with complementary municipalities of the created agglomerations Novi pasar, Kaspichan and Popovo.

The characterization of the studied communities of the "triangle" is necessary to determine their affiliation to a specific type and model communities for future local socio-economic development. Analyzing the dimensions of territorial development of the central areas municipalities in Bulgaria it could be possible to base on 5 types and 10 models for local development. They give the key to the specific and diverse habitats vision in the central regions of Bulgaria. The future of regional models is in two directions:

Finalizing the interpretation of the 10 models and finally accepted them as dynamic and perspective of growth in a medium term period, focusing on three strategic areas:

purposes and policies for future development (5-10 years);

criticism to overcome the state of consolidation and strengthening of each model;

environment for development and degree of intensity of the dialogue between local actors.

Providing a future revision of the 10 model by developing implements for analysis, providing for the ability to determine which development models have better prospects for consolidation and competitive growth in the medium and long term time. Shishmanova M., (2011)

### **First type - URBAN POLIS**

Windows of Bulgaria - Ruse, Veliko Tarnovo, Gabrovo, Shumen, Nesebar, Sozopol.

Innovations are challenge not only in the current time but in the future and they will continue to occupy space with increasing importance in local development plans. Various initiatives have begun or will begin in mid-term period having in view the creation of technological and business parks, promoted by programs for coordination between regions, districts and municipalities and from the world through the representation of entrepreneurs who stimulate the birth of innovative enterprises. Response capacity and integration construct the expressed factor of the model, namely:

Openness and continuity within the deep enterprise culture, evolving into an industrial one, represented not only in the world but also to visitors. This is an extreme synthesis of the range profile, characterized by a strong identity in the economy that will grow increasingly in popularity because of the quality of the historical and cultural call and the positive force of tradition. Medium-sized urban centers with rich fabric of economic production from solid companies and also those with little significance, operating on different markets and often "born" of traditional craftsmanship, which is subsequently converted to industrial enterprises of high-class trend for rapid development and internationalization (textiles, etc.). These medium-sized urban centers modernize the technical infrastructure, seeking sustainable jobs and industries that generate growth. See Fig. 3. Shishmanova M., (2011)

### Second type - AREAS organized iN A NETWORK

Multispecialized, multi-cluster communities - the vast majority of municipalities are with major city center. Such are municipalities of Razgrad and Targoviste.

The theme is "changing the model of development" and it takes longer for some areas in which the debate on the future of the territory is mostly negative after transformations over the past 20 years, as well as commitment to invest in all local sites in order to be developed in areas for large development projects, i.e. it should be an ongoing intensive dialogue between local actors.

With the same purpose, but in a political and institutional context which is rather different, some areas begin to change aiming to experiment interesting innovations creating a "regal territory" for promotion and development of projects between different actors in the area. Strengthening and new callings where possible:

• Development of applied science and development activities. Sectors generating high growth and sustainable jobs. Development of competitive industrial sectors with technological development using specific local resources.

• Allocation of hospitality, tourism and continuity of culture where some areas, although not adopted strategies and targeted policies to support the sector, have specific capabilities to optimize and implement such Directive;

• Distribution of food sector of high quality oenology and gastronomy connecting in a double chain the typical nature, on the one hand, and the technological research, on the other. Shishmanova M., (2011)

#### **Fourth Type - With Potential Events**

Waiting areas, and municipalities seeking their vocation - these are the municipalities of Novi pazar, Kaspichan and Popovo.

This development model is the most numerous and the most widespread in the country. It incorporates many different areas among themselves, but because of different motivations affronted or affronting the phase of crisis, they have a new position of competition and use of local potentials. The pressures of global competition and the changes in the national context do not contribute to greater convergence with the local economy, affirming the need of giving different responses to the different territorial situations.

This model confirms the need and demonstrates in spite of stagnation situation and crisis in traditional development models that areas of development can be differentiated and can apply technological development. Concerning the dialogue between the actors in the area (initiative of partnership in the municipal projects, strengthening of inter-institutional connections, etc.) it becomes weaker than in any other model. In this direction the partnerships understand themselves the need to work more. These communities are able and wait activities to be exported to them. They can become destination of production exports - outsourcing (outsource destination). This requires training and retraining of workforce. See Fig. 3. Shishmanova M., (2011)

Transport direction Targoviste - Shumen - Varna which connects the Danube axis of urbanization (Eurocorridor 7) and the Black Sea axis of urbanization is manifested as the main axis of urban development. It is an axis with great future potential. According to the "Territorial Agenda of the European Union 2020" and strategy "Europe 2020" a major objective of "territorial cohesion for more harmonized and balanced conditions in Europe" in terms of the evolving threats and challenges.

Varna and Ruse are down in elevation to the rank according to the first document. Shumen is situated on the axis near Varna, and Razgrad is near Ruse. Shumen and Razgrad will receive and be able to take advantages of the influence of Varna and Ruse and their economic impulses. The same is true for Targoviste, which is situated on almost equal distances from Varna and Ruse. Furthermore, the municipality of Varna and Ruse are set of the first type - urban poles /polis/ and they have the best chances for social and economic development. It should not be underestimated the proximity of the "triangle" to the Evrocorridor 9 or more precisely to the city of Veliko Tarnovo as this municipality falls into the first type and local model – "windows" of Bulgaria. See Fig. 3.

In the project ESPON polycentric development is represented by a network of active functional urban areas (FUA) in the European space. It is estimated that Bulgaria has the following levels of functional urban areas:

- Only one urban area - a city with European significance - Sofia and brought it to the fourth and final category of these metropolitan cores (MEGA).

- Three areas - cities with transnational/national importance (Plovdiv, Varna and Burgas)

- 27 areas - cities with regional/local importance (primarily medium-sized cities and regional centers). This includes Shumen.

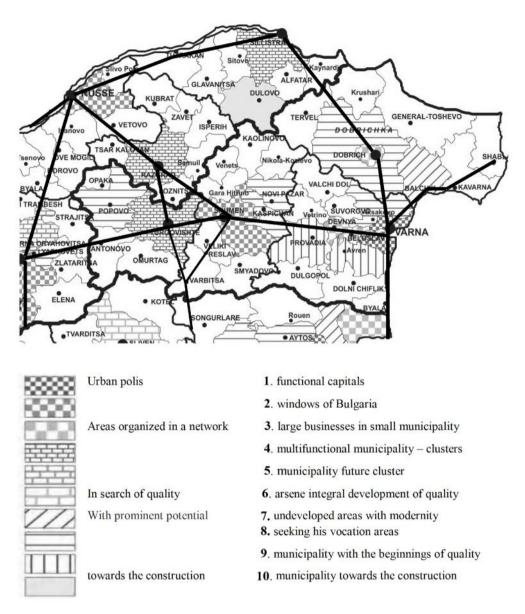


Fig. 3: Local models of the types and kinds of municipality in the central regions

Secondary growth poles and development axes are formed in the country under the National Strategy for Regional Development of Bulgaria 2012-2022 - 10 secondary development centers of national importance: Vratsa, Gabrovo, Silistra, Dobrich, Shumen, Sliven, Haskovo Kardzhali, Smolyan, Kyustendil

It is noteworthy that designated growth poles in Bulgaria are very widely represented and reflected not so much existing status and development, but rather a potential or desirable development.

Regional centers Razgrad, Targoviste, Shumen form a local "triangle" of the urban

development axis between Varna and Ruse. It is necessary to have in view that the transport direction Targoviste-Shumen-Varna connecting the Danube development axis (Eurocorridor 7) with the Black Sea one is represented as a main axis of urban development with future potentials. Moreover, the "triangle" lies on duplicate urbanization axis international transport corridor 9. The municipality of Shumen could receive and would take advantage of economic impacts of Varna as this town is one of the three international/national important centers in the country. The location of the "triangle" Razgrad- Shumen- Targoviste gives a chance for synergy and in better coordination of the socio-economic development can overcome their current not-so-good condition. They could develop complementary activities and create a strong cluster of production, innovations and attract foreign investments; they could create even compatible high-tech industrial sector using specific local resources. Thus the three municipalities will have possibilities to overcome the high unemployment in these areas and to be promoted as a counterweight to the two strong centers of growth Ruse and Varna.

Furthermore, the cities of Shumen, Targoviste and Razgrad work in a hierarchical network level and more precisely represent the "triangle" of interaction as well on the axis Ruse - Kardzhali - parallel and duplicate corridor 9.

### Conclusions

Research, analysis, diagnosis and prospective vision of the central regions in Bulgaria are an important element in regional policy pursued in the country for its successful integration into European economic and social space. With their development they can be involved and to be part of the surrounding areas in order to become central.

It is difficult to summarize in a general theory of central regional areas as it is created at different times, under different conditions and specific situations. It however puts the main directions of development of the economy and the territory at the same time. The focus of the discussion is placed mainly on the center (central areas) and peripherals speaking of "happy" and "unhappy" peripheral areas and how the latter can become center of a given territory.

The area is seen as a network of possibilities:

The level of sector specialization depends on domestic natural resources (e.g. landscape), which give rise to the process of slow industrial specialization or development of the tertiary sector;

Sources of external economic resources generated by the process of territorial development permit to identify at least three main areas - the urban agglomeration economies; economy locations associated with agglomeration of firms in the same industrial sector – distrets, clusters or specialized local systems; economies associated with increasing exchange (increasing return) or return to scale efficiency of individual enterprises, located in the same territory;

Accumulation within the research institutions, universities and enterprises based on knowledge (high-tech sectors, sectors based on known practices of the workforce; sectors based on symbolic models of cognition: fashion, design, art, etc.) and processes of learning and use of external expertise;

Development of institutions (tangible and intangible) oriented economic efficiency and growth of the local industrial structure;

Assign distribution patterns of growth and consolidation of the low cost of knowledge developed in the area with the dynamics of sector diversification and building complexity and synergy.

Recommendation to Bulgaria's economic policy to achieve higher growth is to invest in quality science and education, to ensure the inviolability of private property and to provide quality law which is common to all. Failure to comply with these terms means only one thing - the economic growth of the country to be forgotten.

## References

- Shishmanova M., (2010a). Development of the central regions in Bulgaria, Proceedings of the reports International conference on "Geography and Regional Development", Institute of Geography, Bulgarian Academy of Sciences, Sofia, pp.73-77
- Shishmanova M., (2010b). Development of the peripheral regions in Bulgaria, Proceedings of the reports International conference on "Geography and Regional Development", Institute of Geography, Bulgarian Academy of Sciences, Sofia, pp. 525-529
- Shishmanova M., (2010c). Survey of the status of central regions in Bulgaria, (2010), International Workshop, Bachinovo, Blagoevgrad, April 12-15, 2010, Bulgarian nuclear society, South west university "N.Rilski", Faculty of mathematics and informatics -University of Sofia "St. Kliment Ohridsky", Sofia, Review papirs, Paradigma, pp. 141-147
- Shishmanova M., (2011). The central areas in the context of regional development in Bulgaria, Vanguard Prim, Blagoevgrad, .243-246,254
- Yankova N.,G.Shopov N., St. Ivanov, Y. Kirilova (2009), Territorial disparities in Bulgaria developments, factors and policies, Institute of Economics, BAS, vol.6-8, p . 177-180