

# DEINDUSTRIALIZATION AND URBAN DECLINE IN THE BORDER MOUNTAINOUS REGIONS IN THE CONTEXT OF REGIONAL DEVELOPMENT (AFTER THE EXAMPLE OF THE RHODOPES AND STRANDZHA-SAKAR)

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## *Abstract*

*This paper analyses the effects of the process of deindustrialization immediately expressed in processes of urban shrinkage in border mountainous municipalities of the Rhodopes and Strandzha-Sakar in South Bulgaria. These are areas defined as regions for targeted impact on a variety of geographical, social, industrial and economic indicators. Included is the assessment of urban shrinkage and identification of the trends in the development of the southern border mountainous municipalities caused by the deindustrialization.*

## **Introduction**

Deindustrialization and shrinkage of urban regions are not obscure processes in the context of the territorial development and planning in Europe. They are interconnected and driven by global economic and political processes and phenomena. In Bulgaria, they are the result of political, social and economic observations and transformations of the transition to a market economy starting from the beginning of 90`s of the last century. However, the geographical literature does not describe fully the effects of the deindustrialization, especially on the development of towns-and-villages network and urban space, as expressed by the processes of urban shrinkage, inner-space fragmentation and decline.

The border regions, in turn, show dynamics in the social and economic development, which differ from those in the interior of the country; moreover, a large part of them (southern and western border municipalities) include mountainous and hilly territories where the process of deindustrialization has not just led to the closing of enterprises – the backbone of the economy (mono-structural businesses and towns), but along with the high unemployment, changes in investment potential and active migration processes, this process has contributed to the dynamic shrinkage of urban and municipal territories. There, the process of deindustrialization has not just led to the closing of enterprises and factories, an increase in unemployment and migration, but also to the loss of industrial identity and depopulation characterized as one of the highest for Bulgaria.

The timeliness of the selected theme is confirmed with the fact that the concept of urban shrinkage is still poorly covered in the geographical literature, regardless of the need for its study, given the emerging demographic trends and predictions. According to the latest ones, Bulgaria shall become one of the fastest declining countries where the examples of the axis *shrinking city-shrinking region* have already shown well-defined outlines.

The paper analyses the after-effects of the post-socialist deindustrialization, expressed in the process of urban shrinkage in the border mountainous areas (municipalities) of the Rhodopes and Strandzha-Sakar. Calculated for this purpose, is the intensity of the process of urban shrinkage based on demographic and economic indicators, analysed in the context of the deindustrialization and post-communist structural changes in predominantly small peripheral towns and

municipalities. Addressed are the urban villages and municipalities of Smolyan and Kardzhali regions – all Rhodope-mountains, bound in the social and economical development with the Bulgarian-Greek border; Topolovgrad and Ivaylovgrad and Madzharovo - Haskovo region, Bolyarovo and Elhovo – Yambol region, and Malko Tarnovo - Burgas region. Some of them have no direct connection with the political boundary, but are included in the study because of the similar development and "shrinkage" factors and characteristics. Their development is largely dependent on the proximity to the border, which is a reason to treat them as border regions. At the same time, some municipalities of Haskovo region (Lyubimets, Harmanli, Simeonovgrad) and Sredets have been excluded, as they are not typically mountainous and show different trends in the process of urban shrinkage.

## **Theoretical framework**

### ***Post-socialist deindustrialization***

Deindustrialization is considered a part of the structural changes in the economy that took place in the second half of the twentieth century in all countries with developed economies (Rangelova, 2009). The deindustrialization proceeds differently in every country, reflecting their historical and national peculiarities.

The process of deindustrialization is well studied in Europe and takes into account the specificities of the political and economic context in Eastern and Western Europe. Generally speaking, this is a process of shutting down, closing down of enterprises (many of them leaders in the sectors) and loss of jobs in the industry, leading to transformations in the spatial and functional use of factories and their equipment. The process in Central and Eastern Europe started with the political changes in the former socialist countries from the late 80 's and early 90`s of the last century. The fall off the share of industry in the Gross Domestic Product of the country and in the total employment should be considered as a logic process in countries with market economy (Rangelova, 2009).

Simion (2016) describes two phases of deindustrialization: diminishing of the manufacturing and closing of the factories and turning of large at that time industrial area into brownfields. In this context, the problems associated with deindustrialization in the post-socialist countries are most prominent in the mono-industrial regions, where the mining industry and steel production were well developed. Changes in the structure of the economy, especially at regional and local level, are often accompanied by a change in the professional career and orientation of employees, with increasing unemployment and poverty and intensifying of the social conflicts (Rangelova, 2009). The result of these processes is expressed in the search for new opportunities, usually expressed in the creation of the daily labour migrations, interregional migration, emigration and subsequently in the demographic shrinkage, at the expense of the smaller municipalities and towns with no opportunities for professional development.

Deindustrialization is the process by which: production is not only cut, gives less production, but also becomes more primitive, loses its technological level; production infrastructure is destroyed, funds are reduced, the level of mechanization and automation and complexity of manufacturing operations are lowered, cut is the intellectual basis of production, etc. (Bodrunov, 2014). The greatest harm deindustrialization causes on the population employed in the industry and especially the people in the higher age group. However, this growing sector of services is not able to compensate for the loss in the level of well-being of the population. Apart from unemployment, deindustrialization can lead to such social problems as the rise in the level of crime, etc. negative social phenomena (Putilova, 2018).

Deindustrialization in Bulgaria is associated with the economic reforms undertaken in the transition to a market economy and the deep economic crisis in the first half of the 90 's. To some

extent, it is also due to the selected forms and methods for making the transition and privatisation (high relative share of labor-management companies without adequate financial and professional resource), and not so much associated with the development of the tertiary sector and even less with the increase of labour productivity (Vladimirova, 2008). The radical change of ownership, the loss of traditional markets, the rapid liberalization of trade, the disintegration of the Council for Mutual Economic Assistance (CMEA) has a direct impact on deindustrialization. The belated adoption of the Privatization and Post-Privatization Control Act (2002) accelerates the deindustrialization and the negative consequences. The rapid decrease of the share of the industry, especially of the leaders in many industries such as coal mining, ore mining, mechanical engineering, etc., has an effect on both - the economic development, employment, migration behaviour and the structure of the settlements and the urban network.

Because of the process of deindustrialization, production areas, zones, and even small and medium-sized towns are seriously affected by depopulation and desertion. Administrative districts and regions become totally problematic areas with low competitiveness. The process of deindustrialization of the national and regional economy and its effects in Bulgaria are the subject of study in Economics, Architecture, Sociology, Geography (see Iliev (2004), Vladimirova (2008), Komitova (2013), Ilieva (2012), etc.).

### ***Urban shrinkage and decline***

Urban shrinkage is a global phenomenon. The study is part of the broader presentation of the evolution and fate of the cities (Fol and Cunningham-Sabot, 2010). There is no single definition of what is "shrinking city". However, you may assume that shrinking city is the urban area, subjected to dramatic deindustrialization and depopulation, especially when related to Central and Eastern Europe (Martinez-Fernandez et al., 2012). The process of shrinking has a complex and multi-dimensional character. It is a consequence of both, the demographic and the economic and social factors of development, therefore, its analysis should not include only the change in the number of population.

Urban shrinkage may cover urban area, part of the city or the entire metropolitan area which has suffered population loss, deterioration of the economy and a decline in employment, social issues and conflicts as symptoms of a structural crisis (Martinez-Fernandez et al., 2012). According to Shetty (2009), shrinking cities are the ones that have lost more than 25% of its population over the past 40 years and are characterized by physical abandonment of ownership and ruins.

Urban decline may be considered as a synonym of urban shrinkage or as one of the ultimate forms of urban shrinkage, taking into account that the expression "shrinkage" may be the result of various factors and is in a strong dependence on the national and regional context. The period of the reduction of the volume of the businesses in the cities and the fall of their importance in the hierarchy of urban network made the term ***shrinking cities*** appear, defining the prolonged suffering of the loss of population and jobs, as a result of which the physical dimensions of the city and its infrastructure significantly exceed the needs of its current and future generations (Putilova, 2013).

Yovcheva (2012) emphasizes that deindustrialization should be seen as one of the four main reasons for the emergence of shrinking cities.

### ***Border regions***

Following the classical approach of research, borders are associated as barriers to international trade, and the border regions –as economically adverse that in turn makes them unreliable for urban development. This situation is also interpreted in the thesis that the Government is willing to develop the peripheral areas economically and socially. Usually this is the reason for the

border regions to have the status of military buffer zones, which explains why big cities, regional centres or capitals are relatively rare near the border, while border regions in most cases are not highly urbanized. Border towns are in places not only located near the border, but their very existence is largely determined by the border. (Sohn and Stambolic, 2015)

The concept of border region refers to that part of space, where economic and social life are directly and significantly affected by the existence of an international border. In this sense, we can distinguish open and/or potentially open regions and closed regions (Hansen, 1977). The definition determines the main types of border regions, which reach the point where the social and economic modifying effects of the border are still notable.

Border regions are peripheral in the context of the developed regions, and the periphery can be regarded as a precondition for development and a particular characteristic, due to the specific location (Morachevskaya and Zinovyev, 2013). The problems there are often associated with the theory of localization and the growth poles theory, though these approaches fail to formulate a separate theory of border regions (Hansen, 1977).

In the social and economic sense, the importance of the peripheral (border) region may be expressed with the high percentage of low-tech economic activities, extractive industries in the economy, low income, low level of consumption, dependence on the "technologies located in the center", narrow specialization of local businesses. In demographic terms: the low density, degradation of the urban system, negative migratory balance (including leaving of the working age population).

The post-socialist context is characterised with a change in the understanding of the border in Europe (EU), which is interpreted in the discourse of the globalisation of the economy, the flow of cultural exchange, the expansion and consolidation of the mechanisms of European integration (INTERREG programme of the 90 's), or increased passing through the checkpoint of State borders within the EU. The changing border functions and the means of their use as a resource gave reason to develop a conceptual framework, showing the different ways the open borders allow for cross-border cooperation, strengthening of cross-border economic networks and structures, etc. (Sohn and Stambolic, 2015).

In the territorial context of the EU, these are inner-border regions of the community, with poor results in terms of economic indicators or when compared to other regions where access to public services (hospitals, educational centres) is usually more limited.

The urbanization of border regions is poorly studied in the literature, including in Bulgaria. The borders, as a component of the country are associated with the remoteness, while the cities – with the idea of the centralization (economic, political, cultural), with growth, with accumulation and connectivity. The research on the relationship between the political border and cities may outline a new theoretical perspective in the study of border regions (Sohn and Stambolic, 2015).

### **Methodology**

The methodological framework of the study involves the use of primary and secondary sources of information. These are scientific publications, regulatory, strategic and planning documents; statistical reference books, quantitative and qualitative assessments obtained from semi-structural expert interviews conducted with representatives of municipal administrations and members of local non-governmental organizations from the region in the period 2015-2016. Taken into account, when assessing the shrinkage, is the number of urban population and its demographic peak (census) until 2017 and the dynamics of the shrinkage from 1992 to 2017, as a period of intense deindustrialization processes. Included in the assessment are the municipal centres with settlements of urban-type.

The results are analysed in contrast with a number of economic indicators such as unemployment, investment, employment, etc. The organization of the section Results and Discussion is supplemented by more systematic-structural analysis, discourse analysis, comparative analysis based on some of the quantitative indicators and retrospective analysis, where the basic time benchmark is the transition from a centralized to a market economy.

### **Geographical features of the southern border regions of the Rhodopes and Strandzha-Sakar**

Because of the mainly mountainous character of the municipalities and regions, these border regions have always had a special place in the territorial policies of Bulgaria, though in most cases, not with the expected result. Most of the municipalities fall within "the targeted support regions" under the criteria of the Act on Regional Development (ARD) (Nikolova, 2016). The National Spatial Development Concept classifies these regions as the regions with specific characteristics. Excluding the municipalities located along the Danube and the Black Sea, we must emphasize that the southern border regions are characterized with the predominant mountainous and hilly nature and administrative centres of 4<sup>th</sup> and 5<sup>th</sup> level, as Kardzhali and Smolyan are an exception of the ones discussed in this article. There are no urban agglomerations formed there, as a formed urban core can be found only around Smolyan (Yankov, 2000).

The municipal centres of these border municipalities suffer of a serious loss of human resources, especially intensified in the 90's. The fact that contributes to this situation is that the peripheral location of these municipalities has determined their isolation, not only physical, but also social and economic isolation from the dynamic processes of development in the interior of the country. In addition, they are characterized by poor transport accessibility, insufficiently developed public services, as well as with the insufficient number of border checkpoints, that restricts development and cross-border cooperation.

The urban settlements in southern border regions of the Rhodopes and Strandzha-Sakar have special regional context. On the one hand, this is their peripheral geographical position (political borders of Bulgaria with Greece and Turkey), and, on the other hand, the towns there (with the exception of Smolyan) have a peripheral significance, as estimated from a geographic and economic viewpoint. The economic indicators are relatively low and very often they are a result of underdeveloped economic structures, the absence or underdeveloped communication connections, etc. The municipalities have low investment activity, missing transnational companies and no large trans-European projects implemented.

The population of these areas shows clear trends to ageing, and respectively demographic shrinkage, with some exceptions for Kardzhali region. Depopulation processes cover a large part of the lands of these municipalities, as the depopulation is particularly intense in Smolyan, Madan, Momchilgrad, Krumovgrad, Madzharovo, Ivaylovgrad, Elhovo, Sredetz, Malko Tarnovo.

### **Historical context**

The border location is neither an advantage nor a disadvantage, and the treatment of one and the same border may differ in historical periods. This is also analysed by taking into consideration of the economic and geographical position – a dynamic category, the assessment of which reflects the different spatial experience of the society in time. The political and economic realities before 1989 give interpretation of the border regions in the context of the border - the barrier and the border zone with restricted usage regime.

The border zone was created at the beginning of the 50 's, covering an area around the border with an average width of about 20 km. In 1951 these regions got some preferences –the right to

get additional amounts of basic foods (especially flour); a reduction of 30% of the tax on the total income of all the inhabitants of the border zone; supply with goods hard of access, sold at "free prices". These preferences aimed at achieving a compensation effect at the expense of the communication and economic isolation of the local communities.

No large industrial sites of national importance from the point of view of public safety and security were built in the border regions of the Rhodopes, Sakar and Strandzha. In addition, no large urban systems were built that could play a role in organising the space – an indicator of the weakly expressed urbanization processes.

In the border regions of the Rhodopes, Sakar and Strandzha is not build large industrial sites of national importance from gen. so the public security and safety and. Do not develop and large urban systems that play a role in organising the space – an indicator of weak expressed the urbanization processes.

The government conducts a targeted policy to stabilize the demographic and settlement processes in the peripheral mountainous regions. One example is the adoption in 1982 of the 22<sup>nd</sup> Decree of Council of Ministers (COM) providing incentives for young people to settle in the undeveloped regions of Bulgaria. The emphasis is on the Strandzha and Sakar that are most highly depopulated. The decision of the Council of Ministers is known as Programme for 'Accelerated social and economic development of the towns-and-villages systems of the 4<sup>th</sup> and 5<sup>th</sup> functional type of the border regions in the Strandzha-Sakar area. The reasons for the adoption of the decree are that the area of Strandzha-Sakar is depopulated, sharp social issues have not been resolved – 561 settlements along the southern and western border have no water supply, 200 have no roads to the center of the settlement system or to a different place, 550 have no direct telephone connection and provided radio-television coverage. The campaign is called "Republic of youth" and its main purpose is comprehensive and accelerated development of the industry, agriculture, and the building the social and technical infrastructure in the undeveloped regions. It provisions, by 1990, the living and working conditions and the living standards for the population in the area of Strandzha-Sakar to reach, and in certain terms to surpass the average growth of the country.

### **Results of the study**

The modern borders are diffuse ones and easier passable. Today, border regions are open systems, but encumbered with new geopolitical, demographic and social and economic burdens, bearing the inertial heritage.

The majority of the border towns have mono-structural economy (50% of a leading depressive industry), high proportion of the employed in the industry, high unemployment, declining relative share of the employed in the mining and manufacturing industry. Characterized with higher industrial employment in 80-90`s of the last century are Dzhebel, Kardzhali, Dospat, Madan, Rudozem, Topolovgrad, Madzharovo. The mono-structural economy (a leading depressive industry) for the same period is typical for Rudozem, Madan, Zlatograd, Dospat, Madzharovo, Topolovgrad, Malko Tarnovo. Some of them fall within the restructured mining area of "Gorubso" with the closed down inefficient mines and production capacities of ore-dressing plants and Lead-Zinc plant in Kardzhali; "Ustrem" mine and "Burgas Copper Mines". The municipalities of this border region with unemployment higher than the average national are Madzharovo (21.6%), Kirkovo (20.3%), Ardino (19.5), Bolyarovo (18.4%), Dzhebel (18%), Ivaylovgrad (17.9%), Dospat (15.8%), Devin (15.3%) (2017). The decrees of the Council of Ministers (CMD) 140/1992 for the restructuring of the mining sector and the closure of inefficient production capacity, CMD 235/1993 and CMD 37/1995 have a direct impact on the social and economic development of the southern border mountainous towns and villages and high levels of unemployment for a long period. The ore-dressing areas are affected by the

"resource cycles", where the long-term mode of exploitation of resources and subsequent collapse are inevitable. The mining towns are in the critical zone of decline, depression and "shrinkage", in need of re-cultivation in peri-urban areas.

A large number of the border regions are of no interest for the economic diversification, which makes them vulnerable. At the same time, they have a poor social and economic potential for an endogenous development and therefore, require targeted actions and policies at different territorial levels. The border regions have limited urban resource – areas, inherited buildings in good condition and infrastructure. In Smolyan and some of the small towns of the area, the reserves for revitalization, conversion and re-utilization are not used; and in Kardzhali - the non-functioning facilities have a linear structure.

The predominant mono-structural economy in the border municipalities has a negative effect on the quantitative and qualitative indicators of urbanization. So today, Kardzhali is the least urbanized region in the country – only 41.2% urban population (2017) and the estimates of the urban population for Smolyan are below the average ones for Bulgaria–55.5%. (2017). The two mountainous regions had in the past and still have low daily occupational mobility, due to the mountainous terrain, the remoteness from the major industrial centres and investment cores, the problematic transport infrastructure. Similar is the social and economic situation in the municipalities of Malko Tarnovo, Bolyarovo, Madzharovo and Ivaylovgrad, which in the 80`s were part of the Kardzhali region. In contrast, Topolovgrad has a higher daily labour mobility, because of its proximity to the Maritsa Iztok, which emerged as less directly affected by the deindustrialization, and stronger affected by the demilitarization. In the southern border towns, the deindustrialization is not associated with the tertiarization of the economy and takes place in a different way compared to the urban centres in the interior of the country.

Table 1 shows the urban shrinkage in the southern mountainous periphery compared to the demographic peak of towns and villages (1975, 1985, 1992) to 2017. The urban settlements reviewed are centres of municipalities with a strongly decreasing employment in the industry, which is an indicator for the expression of the process of deindustrialization. The closure of heavy industry businesses and the decline of tobacco production has led to the emergence of reverse migration, typical for Bulgaria until 1944. The farm workers seasonal migrations are oriented to the vegetable farming in the Pazardzhik-Plovdiv field, Greece and for the construction workers - to Sofia, Plovdiv, etc. Less than 25% is the reduction of the population in Devin, Chepelare, Dospat, which have a highly developed tourism features – an alternative for the local development. Smolyan is the region with the greatest reduction in the population in 2017 and it is the smallest regional town.

Urban centers	Demographic peak	Demographic shrinkage until 2017 (%)	Demographic shrinkage from 1992 until 2017
<b>Devin</b>	1985	24.1	4.8
<b>Dostap</b>	2001	21.9	22.0
<b>Smolyan</b>	1992	18.3	18.3
<b>Chepelare</b>	1992	22.7	22.7
<b>Zlatograd</b>	1985	26.6	27.2
<b>Madan</b>	1975	50.9	37.2
<b>Nedelino</b>	1992	27.5	27.2
<b>Rudozem</b>	1965	49.9	30.1
<b>Kardzhali</b>	1985	22.1	5.7
<b>Momchilgrad</b>	1985	24.4	3.4
<b>Dzhebel</b>	1985	32.5	-
<b>Ardino</b>	1985	28.7	-
<b>Krumovgrad</b>	1985	29.3	11.5
<b>Ivaylovgrad</b>	1992	37.8	36.8
<b>Madzharovo</b>	1985	70.8	66
<b>Topolovgrad</b>	1992	33.8	33.8
<b>Bolyarovo</b>	1992	42.8	42.9
<b>Elhovo</b>	1992	31.7	31.7
<b>Malko Tranovo</b>	1965	56.4	45.2

Table 1: Demographic shrinkage in the urban centres. The authors (NSI data, 2017; Mashke.org: Population of Bulgaria)

What impresses is the fact that the demographic shrinking, from the demographic peak in 1965 in Malko Tarnovo and Rudozem to 2017, is about 50% or above, and the subsequent shrinkage continues at lower rates until 1992, and then the rate of population loss increases. The demographic peak of the towns of Kardzhali, Devin, Zlatograd and Madzharovo is in 1985 and it is caused by the deportation of Turkish population (the so-called Revival process of the 80 's), and by the worsening of the demographic situation. The Rudarski settlements (Madzharovo and Rudozem) increase the rate of "shrinking" after 1992, showing the clear relation with the closure of the mines there. Seven towns reach the demographic peak in 1992 – Smolyan, Chepelare, Nedelino, Ivaylovgrad, Topolovgrad, Bolyarovo, Elhovo. The demographic collapse in the last three towns is associated not only with liquidation of business entities, but also with the curtailment of the Third Army and the closure of the barracks and related service activities. Only



Dospat is with a demographic peak in 2001, which can be explained with the fact that most businesses are of the light industry, forestry and production of electricity, therefore, less affected by deindustrialization processes. Towns like Ardino and Dzhebel have recorded a slight increase in the population over the last few years.

The towns of the Kardzhali region covered in the study show no clear shrinkage of towns after 1992 (the start of deindustrialization), taking into account also that the region has a positive natural growth in 2017. On the other hand, the processes of depopulation in the rural areas is more alarming. Only in 2017, 10 villages of the region have no inhabitants and 23 are of a single-digit number of the population, delimiting an area of threatened villages in the Eastern Rhodopes. These results outline an interesting territorial situation – on the one hand, poorly-expressed urbanization processes and, on the other hand – regressive development of the rural settlement system. The new upsurge of mining in Krumovgrad and the nearby settlements shall undoubtedly play a positive role in the local development. This conclusion is confirmed by the fact that there are no conditions for the development of high-tech industries in these villages.

The effects of deindustrialization can be mitigated with the inflow of foreign direct investment (FDI). This has a direct connection with the development of the urban social and economic environment. The border regions have low investment activity, and in recent years Smolyan and Kardzhali regions, have moved between 16-18<sup>th</sup> position among the 28 regions. Some of the regions of the southern peripheral model of foreign investment register active participation in the investment process of companies from Greece and Turkey, and even from Germany, Austria and the Netherlands, which has no direct correlation to their geographical location (Milkova and Dokov, 2017). For example, in municipalities and urban centres as Bolyarovo, Ivaylovgrad, Malko Tarnovo and Elhovo the investment interest is missing and the compensatory mechanisms against deindustrialization are highly limited. The lack of industrial zones, clusters and technology parks in the border areas, the unfavourable educational structure of the population (Kardzhali region – the people with graduated higher education are 17.2%, Smolyan region - 21.7%, mean value for Bulgaria – 27.5%, 2016) limits the development of high-tech industries, which is the reason for registered economy of a "factory-type". This delineates the border urban regions as dysfunctional, possessing features of an industrial society, and not a post-industrial one.

The solution of the problems of deindustrialization beside at the governmental level, should be a priority of the local and regional authorities. Local civic associations, voluntary work, solidarity to the general problems, consolidating on territorial interests is one of the reliable markers for measuring the status of social transformations in the space section on local problems solving. The ability to interact is one of the main qualities of the location, and the combined efforts of NGOs, the regional elite, entrepreneurs and authority structures is the possible stimulus for the development of these territories. The NGOs in Smolyan region, are over 130 (2016), with domination of the ones with public benefit (94%). More than 20% have as the main objective the social and economic development of the municipality. Most of the local initiative groups (LIG) are of the cluster principle (e.g., Chepelare - Devin), that makes them more effective. The largest number of local development organizations out of the regional center, are registered in Devin. No organization has listed as a specific objective the surmounting of the consequences of the deindustrialization or stimulation of the reindustrialisation. The NGOs in Kardzhali region are about 110 (2016), of which only 3 are of private benefit, about 10.8% have the local social and economic development as main objective, only 3 organizations use volunteer labor. Kardzhali, in contrast with Smolyan region, has the most sports NGOs and some municipalities have no established voluntary structures. What makes an impression is the activity of the local communities in Elhovo (17 NGOs), Malko Tarnovo (6), Ivaylovgrad (7) (2016), some of which

are directly involved in cross-border cooperation projects, mainly in the field on tourism. The Committee for Economic and Cultural Rise of Malko Tarnovo and its district deeply impresses with its more than 90 years of existence. The positive fact is that there are organizations working in the field of education and culture in almost any administrative unit. The approach adopted "Local development led by the community" is in the basis of the principle of decision making "bottom-up" and is perceived as a factor of sustainable development. It is clear the condition sufficient for success is not in the large number of organizations, but in their effectiveness and, more importantly – their coordination and interaction.

### Discussion

No doubt, the results shown in Table 1 outline several groups of towns, formed in accordance with the demographic shrinkage resulting from the deindustrialization started in Bulgaria. Without sticking to a specific typification or categorization of shrinking small-and medium-sized towns, the following groupings of shrinking could be formed:

- < 6% - Momchilgrad, Devin, Kardzhali;
- 10-25% – Krumovgrad, Smolyan, Dospat, Chepelare;
- 25-40% – Zlatograd, Nedelino, Rudozem, Elhovo, Topolovgrad, Ivaylovgrad, Madan;
- 40-60 – Bolyarovo and Malko Tarnovo;
- > 60% – Madzharovo.

The first group includes the towns and villages of predominant Turkish and Bulgarian- Muslim population; the second group includes the towns and villages with not highly developed extractive industries and tourism features expressed after the 70`s of the last century. Most affected by the shrinkage are the typical mining towns, with poorly diversified structure of the holdings and the military-garrisoned ones that confirms the theoretical formulations for deindustrialization and urban shrinkage in the border region.

The analysis of the results shows that the processes of industrialization, urbanization and deindustrialization have the specific signs of the mountainous border regions in Bulgaria. Urban life in the southern peripheries is attuned to the rhythms of agricultural production cycles, especially to the tobacco production and in this discourse, some municipalities can even be characterised with the processes of pseudo-urbanization. In the course of deindustrialization, the mines and the factories lose their place in the cultural and social life in the Rhodope Mountains and Strandzha, without being replaced by new structures. This inevitably affects the weakening of local communities and their demographic and urban shrinkage. These findings are the result of the interviews conducted (2015-2016) with local entrepreneurs, members of non-governmental organizations (NGOs) and representatives of the local administration in Banite, Zlatograd, Rudozem, Madan, Nedelino, Dzhebel, Ivaylovgrad, Topolovgrad and Malko Tarnovo.

The study shows that the number of NGOs is quite great, but most of them have no coordination and agreements for joint actions with the municipal management. Indicated as major problems are the closure of enterprises, the decline of mining and agriculture, migration with effect of depopulation. Some of the people interviewed in the small municipalities consider urban farming as an alternative to creating sustainable local communities in the shrinking towns. Zlatograd, Madan and Rudozem suffer from nostalgia for the old mining glory, and Topolovgrad – for the military-garrisoned features. The views in terms of the perception of the border regions as a transit zone are divergent. The people interviewed from Ivaylovgrad and Zlatograd say that the opening of the border checkpoint does not give the estimated value at the expected degree for local transit position.

The people interviewed in the municipalities of the Rhodope Mountains do not feel the need to increase industrial production, but to focus on tourism and ecosystems services. One of the arguments in support of this is the fact that the Smolyan region has the lowest levels of carbon dioxide in Bulgaria (2016). The representatives of municipal administrations and NGOs in Malko Tarnovo and Topolovgrad think it shall be appropriate to develop an overall concept for the border region, not to work on the piece; and as a problem in the municipalities they consider the growth of Roma population (11.3% of Malko Tarnovo, 2011), settling in the free buildings, where the degradation processes continue; and on their activities – the limited human resources with administrative capacity. They have a pessimistic view to the new programme for the development of agriculture in the rural areas of Strandzha-Sakar, although in some of the border municipalities no more than 1/3 of arable land by 2016 is cultivated. Dominating is the opinion of the representatives of all municipalities that the local authorities have to be more active in promoting the region as a place for living, business and tourism.

### **Conclusion**

The restructuring of the economy and employment, accommodation, adaptation, the surmounting of the consequences requires enormous management efforts at different levels (national, local), as well as the study of their effects with the aim of finding adequate policies and programs, and instruments for their implementation. This could contribute to the improvement of new actions to be undertaken in similar regions for restructuring with a view to enhancing their effectiveness and reducing the economic and social costs of developing processes of restructuring, deindustrialization (Vladimirova, 2008).

Deindustrialization in the southern mountainous border municipalities leads to the loss of industrial identity, disruption of the daily norms and values, change in the spatial stereotypes. The deindustrialised and border regions are getting a clear image of declining regions, given the condition of urban shrinkage and decline, though the specific example in the study clearly shows that a number of social, cultural, and physiological and behavioural factors of the population have an impact on the status of these relatively small towns. The analysis of these types of studies is an imperative.

The process of urban and demographic shrinkage seems irreversible for many of these border mountainous towns considering the specified trends and the results of territorial policy conducted to 2017. In this context, the mixing of urban, regional and industrial policies fails to reduce the social costs of deindustrialization. The political response to the spatial strategies comes down mainly to the refusal of the "perspective uniform for all", but should focus on an approach based on: "place, relation, complementarity and cooperation" within the border territorial context. A tricky intersection between the deindustrialization and the social inequalities is in formation and it should be articulated from the positions of targeted local and regional policy.

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