THE URBAN SHRINKAGE OF THE SMALL TOWNS LOCATED IN SOUTHERN PART OF BIHOR COUNTY, ROMANIA

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Abstract: The urban shrinkage\textsuperscript{1} is a common phenomenon among East-European small towns. Effects of this phenomenon are much stronger in case of the former mono-industrial small towns emerged during the communist period in Romania, where after the 90’s have been manifested a series of major political and socio-economic changes. The aim of this paper is to detail the specific situation of the former mono-industrial small towns located in the southern part of Bihor County, where the effects of de-industrialization and the incoherent post-communist development policies have hallmarkmed the structure, the spatial organization and the urban functions of these towns at local and regional level (sum of aspects that actually led to urban shrinking). Thus, the towns of Stei, Nucet and Vaslui, emerged in the 50's as a result of forced industrialization, currently are three of the smallest towns of Romania, confronted with a strong demographical, social and economic decline. If in the future these cities maintain the same rate of population decrease, it raises a question mark over the real chances to provide a smart urban shrinkage.

Key words: urban shrinkage, former mono-industrial small towns, Romania

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\textsuperscript{1} Urban shrinkage was originally introduced in German specialized literature - schrumpfende Stadt - (Hausermann, Sibiel, 1987) in their book Neue Urbanität the urban shrinkage phenomenon is approached through discussion on the relationships between: growth, stagnation, economic and demographic decline. Later (1988) the same authors in a paper are studying the structural changes caused by the de-industrialization of 70s-80s, customizing the study of urban shrinkage of former industrial cities.

http://istgeorelint.uoradea.ro/Reviste/Anale/anale.htm
INTRODUCTION
At the beginning of XXIth century the urban shrinkage is a widespread phenomenon in Europe, as for industrial agglomeration from Western Europe, facing economic decline (Bontje, 2004) and in sparsely populated areas from Northern Europe (Finland, Sweden) or rural areas from Southern Europe (Italy, Spain), which are facing the emigration and the decreasing birthrate problems. However, the most affected by this phenomenon were the cities of Central and Eastern Europe, occurred as a result of communist industrialization, where political changes of the 90s caused a pronounced industrial decline, which led to population decline. (Wiechmann, 2009). In this way the shrinkage phenomenon became a normal trend for former industrial cities in Poland, Czech Republic, East Germany, Romania, Ukraine. (Rink et al, 2010)

In Romania the majority of cities exclusively based on industrial activities become bankrupt, situation that corresponds also for the small towns located in southern part of Bihar County, which have suffered a reposition in both: national urban hierarchy and in relations with the neighboring territories, bearing the consequences of forced urbanization typical to communist period. This situation requires the redefinition of the role and of the development strategic directions of these settlements on medium and long term.

Generally industrial decline and job losses are strongly linked in a downward spiral, resulting demographic losses, in this circumstances local authorities and decision-makers are forced to redefine local and regional development policies (Pallagst et al, 2009). According to a study made in Europe, post-socialist growth strategies are based on exogenous development policies to increase the number of jobs, by attracting inward investment and European financing, without considering the causes and consequences of the urban shrinkage phenomenon on long-term, the growth being oriented rather on neoliberal principles (Bernt, 2009).

According to the studies carried out on this subject, small towns that still depend on agriculture, forestry or mining activities, will most likely continue to be affected and to fight for survival, instead greater chances to be innovative and to adapt to the new current economic conditions will have urban settlements that have preserved their identity and their role over time. (Daniels, 1993) For the cities corresponding to the first category, the existent physical and social structure is under pressure: houses are sold with difficulty, schools must close, the services and facilities are too expensive to be maintained, therefore to overcome these problems joint actions of local authorities in cooperation with citizens are required, the major challenge being to find viable alternatives of smart shrinkage, which would contribute to the improvement of the quality of urban life. (Grisel et al, 2011)

OBJECTIVES AND METHODS
In this paper, for a better understanding of the causes and of their implications in manifestation of urban shrinkage phenomenon, was studied the situation of former mono-industrial very small towns of Nucet, Vașcău and Ștei.

The question that this study aims to answer is: Which are the alternatives to ensure a smart urban shrinkage? given that the socio-economic decline of the towns of Nucet and Vașcău is manifested of more than two decades.

To answer this question has been used the specific methodology established to determine the development potential of a city. Therefore has been used a number of methods specific to socio-economic and demographic study, taking into account in particular the principles of: the spatial distribution – influence of internal and external factors on the number of the population in a territory, the causality principle, the regionalism principle, the geographical integration principle and the sociological principle that reveals the role played by social factors on studied towns.

Based on socio-economic indicators, a series of charts and sketches had been made, which suggestively presents the current situation of these small towns and contributes to an easy identification of the possible directions for achieving a smart shrinkage on long term.
THE LOCATION AND THE EMERGENCE CONDITIONS OF THE STUDIED SMALL TOWNS

Towns of Ștei, Nucet and Vașcău, located in the Southern part of Bihor County belong to the category of small towns, emerged in the 50s as a result of forced industrialization. In the post-communist period these towns are experiencing a pronounced demographic decline, according to the 2011 census they are among the smallest towns in Romania (Nucet and Vașcău about 3,000 people each and Ștei about 6,000 people). Their area of influence was restricted at local level, only on their component localities\(^2\) (Petrea, Prașca, Filimon, 2012) and at regional scale of Beiuș Land they are subordinated to town of Beius (figure 1).

\(^2\) In 1956 at the time of their occurrence, to the administration of the towns of Nucet and Vașcău have been added some neighboring villages, so Nucet has two component villages and Vascau has five component villages, just to fulfill demographic standards required at the time for the urban status.
The history of the towns of Ștei and Vașcău stretches over a longer period of time, settlements existing since the Middle Ages, while the town of Nucet has a more recent history - appeared in the communist period as a dormitory town for Baita mining exploitation, a response to economic and territorial policies promoted at the time. In 1956, in the South of Bihor County as well as in other areas of the country, the occurrence of these small towns outlines two distinct urban typologies: a new town - made according to socialist principles and others - forced converted from rural to urban areas. But beyond their urban status, because the transformation were very quick they could not adapt and they kept mostly their rural character, especially in case of Vașcău. For both urban typologies identified it turned out that industrial activity as a single activity is not sufficient for the development and the sustainability of an urban settlement.

**THE CAUSES AND THE CONSEQUENCES OF THE URBAN SHRINKAGE PHENOMENON**

At European level urban shrinkage phenomenon was studied more for medium and large sized cities, this is because 40% of them are facing massive population loss, but urban shrinkage effects are very strong in the case of small towns too, the stages and the model development of this phenomenon are the same regardless of the size of the studied towns (figure 2).

The urban shrinkage occurs when the interaction between macro-processes leads to population decline with direct consequences (evacuated houses, inadequate infrastructure, declining tax revenues) and indirect (changes in population structure and the demand on the labor market, socio-spatial differentiation, reduced capacity of local investment) in the urban development process. (Rink et al, 2010).
Based on a general demographic analysis it appears that the percentage loss of the population is more accetuate in small town, compared with the demographic decline percentage corresponding to large cities. In the case of studied small towns, as well as for all the other cities, there are three moments: the context and the causes for the appearance of the urban shrinking phenomenon (at macro-scalar level), its manifestation (expressed primarily by demographic losses) and long-term consequences of this phenomenon, with negative implications at local level (figure 2).

If in terms of manifestation and consequences of this phenomenon there are strong similarities for the the majority of towns, not the same can be said about the causes and the context of urban shrinkage process installation. Häusermann and Siebel (1988) identified two main causes of the urban shrinkage installation: suburbanization which means that the interest of the population is focused on suburban areas at the expense of urban areas and the second cause according to the same authors is the economic transformations, manifested in towns with industrial or mono-industrial base, which in the current context provides a less favorable development perspective. (Häusermann, Siebel, 1987).

Even if the manifestation stages and the consequences of this phenomenon are similar, in case of large cities, the negative impact on them polarized area is directly proportional to their size and may lead to the decline of the entire region, reason why the interest shown for urban shrinkage of large cities is higher (growth poles development policy at national level). Under these circumstances, small towns are put on a second place, but without studies and development policies, very few of them manage to overcome the effects of urban shrinkage. In many cases, the effects of the phenomenon are already serious and difficult to counteract, leading to the overall decline of cities (example the town of Vașcău).

The main causes that triggers urban shrinkage phenomenon in towns from southern part of Bihor, have their roots in changing policies and directions of development imposed at national level (macro-scalar): starting with socialist policies of forced industrialization and urbanization and continuing with development policies specific to post-socialist market economy (de-industrialization, globalization) to which small towns such as those studied, did not have the ability to adapt. Among the main causes of urban shrinking in the case of the former monoindustrial cities we have studied, a major role was played by the economical transformation process from a communist centralised economic system to the capitalist market economy, doubled by an increased de-industrialisation. The industrial restructuring faced difficult situations caused by increased storage, lack of knowledge about the market, loss of traditional markets, lack of modernisation capital and low investment rate (Iordan, 2006), thus the industrial decline overtook the speed of alternative activities and the creation of new urban structures (Ianoș, 2004). This lead to a blockage in the economical revival, as the de-industrialisation was synonymous to closing down the main companies and to job loss due to the lack of demand on the work force market. Taking the social problems as a natural consequence of the changes and the imbalances created, some authors consider the economical transformations as the main cause for setting off urban shrinkage (Vaishar et al, 2012).

While 60% of the population in the studied cities was engaged in industry in the 70’s, after the 90’s the percentage dropped in favour of the population engaged in the tertiary sector. This phenomenon was particularly present in the case of the town of Nucet, where in the year 1992, 57% of the active population belonged to the industrial sector and only 42% to the tertiary sector, while by 2010 in the same town the industrial engaged population dropped to 30% in favour of tertiary sector active population with 64%. Given that there is a lack of balance between the economic sectors, on the background of globalisation of the local economy, the growing and developing potential of these cities is quite low, as the tertiary sector does not provide enough jobs, the active population is forced to migrate to larger cities. An exception to this tendency is the town of Ștei, where at this moment over 50% of the active population is engaged in the industrial sector, in food industry. Therefore, in the town of Ștei, unlike the towns of Nucet and Vașcău, the
monoindustrial character was installed during post-communist period (Dumitrescu, 2007). This is the main reason why urban shrinkage phenomenon is lower in case of this town, but being set up. The monoindustrial activity rises questions about the sustainability of its development, as a potential ceasing of the activity in food industry could lead to a collapse not only for the town of Ștei, but for the whole Southern area of Bihor County, which depends on Ștei’s industry. Although the small towns taken into this study have some particularities previously pointed in this paper, the main cause of urban shrinking is the general decline of the urban settlement, like in the case of larger cities. As pointed out in previously cited papers, the demographic decline and transformations (migration and demographic ageing) are the most relevant indicator for this phenomenon. By analysing the population evolution of the three towns in the last century, we notice the massive demographic increase in the 50s and 60s, in the historical moment of their forced urbanisation. But the high demographical values are maintained for less than 20 years (1950 – 1966). The maximal demography is listed in the 50’s in the case of Nucet and Vascau, the period between 1948 and 1956 brings a modest demographic increase of only 2,66% in Vascau (a market and important centre of Southern part of Bihor County until the 40s), and a demographic explosion of 1168% in the urban area of Nucet, while for Ștei the demographic peak is reached only in the 90s (figure 3), when an important producer in food industry settles in the old administrative centre of Bâtta exploitation. The demographic decline and the beginning of urban shrinkage are present in Nucet and Vascau cities since the 70s, with a pronounced character in the post-communist period, as for Ștei, the noticeable demographic decline settles in the year 2000, on the background of globalisation and competition in food industry market. The socio-economic decline become worrying between 2008 and 2011 in the case of all the three cities, in the context of the economic crisis which led to closing down small economical activities and major job loss. With a negative growth rhythm, the cities of Vascau (-19,72%), Ștei (-17%) and Nucet (-13%) are facing a pronounced demographic regression, the largest of the last 40 years; this phenomenon combined with the degradation of urban lifestyle, put a question mark on the status of these towns and also on their future.

A simple look at the urban indicators in the towns of Nucet and Vascau (according to ESPON 2007 indicators) reveals the lack of administrative institutions, lack of relevant economic factors like companies or representative offices, lack of specialised medical units, lack of high-school and superior education units, lack of urban transport and a weak connectivity with surrounding settlements. Moreover, except the town of Ștei where the socialist urban structure still sustains an urban landscape, the other two towns Nucet and Vascau have a profound rural character (Prasca, 2012), with single dwelling houses, wide gardens, linear street tissue, lack of

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Figure 3. Demographic evolution of the three studied towns, in the last century
(Source: INS)
public spaces like public squares, promenades, parks. The socio-economic and demographic changes that triggered the urban shrinkage phenomenon have also inevitably determined changes in the regional and local role of these studied very small towns. In the case of Nucet and Vașcău, their influence is felt only upon their component villages, while Ștei still represents a polarisation point for the rural settlements of Southern part of Bihor County. By analysing the situation of small towns we notice tendencies of the Matthew’s effect - the rich become richer, where the poor become poorer (Merton, 1968), the small towns lose their influence and face a pronounced demographic decline, while the attention of regional development policies focus more on larger cities and growth poles. Based on this study we can identify a general valid model of urban shrinkage typical to small former mono-industrial towns, characteristic to all urban Romanian settlements that emerged and evolved similar to the cities we have studied in this paper.

CHALLENGES OF URBAN SHRINKING

We no longer plan expanding cities, planning for shrinking is a reality in the face of population loss and urban contraction, and can be viewed as an opportunity, a chance to change traditional approaches and attempt innovative solutions (Hollander et al, 2009). There is a misunderstood concept that a healthy city must grow, because growth is confounded with development, but many cities face the challenge of urban shrinkage. (Hollander et al, 2009).

At a European level there is a platform that follows urban shrinking by monitoring some cities in key areas. This project monitors ten cities that face urban shrinkage, from Liverpool (UK) to Donetsk and Makiiyla (Ukraine); in most of these cities, especially the ones from Eastern Europe, urban shrinking emerged due to the political and economic changes from the 90s. This project proposes reports containing a series of measures that should be implemented, according to the authors, at a regional, national and even European level, for a better coping with the urban shrinkage (Bernt et al, 2012).

At regional level, it is recommended: to align urban regeneration and planning policies, to establish agencies focused on regeneration and urban planning mechanisms on local and regional level, to include development scenarios in topical planning decisions, and to include all actors in decision making process: local administration, utilities, health organisations, local community and NGOs. At national level, according to the same study, it is recommended: to coordinate policies for shrinking cities in all sectors of government and to strengthen public debates on shrinking cities. At European level it is recommended: to encourage sustainable development on all cities, giving a greater attention to medium and small sized towns and to implement financial mechanisms specific to support development for shrinking cities. Studies regarding urban shrinkage in Romania are focus mainly on large and middle size cities, for example Timisoara, which is the only Romanian city included in the European project mentioned earlier (Rink, 2010), Târgu Mureș, Piatra Neamț, Bacău in other studies (Wiechmann, 2009), and less on small and very small towns like the ones analysed in this paper. In Romania, studies regarding urban shrinking are few and with little impact on local planning and development strategies. As a result, local development strategies of small towns for the time interval 2007 – 2012 were focused mainly on economic growth, without taking into account the context and consequences of urban shrinkage.

CONCLUSIONS

After analysing the small towns in this study, based on their own particularities, we can conclude that the phenomenon of urban shrinkage has powerful effects on them. With major demographic loss, the cities we have studied face a period of prolonged decline, emphasised after 1989. We can also notice that smaller towns have a reduces capacity to cope with the consequences of urban shrinkage, in comparison to large cities that have better adaptation capacities to changes and better strategies. Large cities have bigger attention because the impact of urban shrinkage is directly proportional to the city size, while in small towns like the ones in this study, the effects of the phenomenon are strictly local. In these conditions, small towns
development strategies should take into account in particular the urban shrinkage phenomenon. The results of this study are eventually materialised by proposing two alternatives to implement smart urban shrinking into Romanian small towns like the studied ones: one is to aim for growth by using administrative and social policies sustained by common efforts, the other is to transit to an inferior state of rural settlements, taking the advantages of the actual rural development policies. The first action should be the acceptance of urban shrinkage, by local authorities and population, no matter of the chosen development strategy. The fact that the studied towns lack a long urban tradition can be used as an advantage, being a proper field for a local re-invention, re-branding, starting with the example of other towns that faced urban shrinkage.

The first alternative, to an urban growth, should take into account the clear dominance of the town of Beiuș over the whole Southern area of Bihor County (Filimon et al, 2011). Next to Beiuș, the trio Ștei – Nucet - Vașcău could consolidate the status of secondary pole of Beiuș Land, but this is possible only through decentralisation policies, polycentric urban planning and mixing urban functions, all efforts sustained at a local and regional level. It is well known that a compact city is more efficient than a disperse one, but in this case a solution would not be creating a single city by uniting the three, but strengthening three closed centres adding to each on complementary urban functions and developing a good interconnectivity through an efficient public transport network.

The second alternative, the transition to an inferior status of rural settlement is suitable to the towns of Nucet and Vașcău due to their particular rural character, as their development as urban centres is quite difficult. Very small towns like Nucet and Vașcău could benefit from shifting to a rural settlement, by becoming communal centres, having urban utilities, eliminating high taxes; moreover, they could benefit from accessing governmental and European funds that are exclusively destined to urban areas. In these conditions, the town of Ștei could have its position as a secondary pole in southern Bihor County, after Beiuș, well consolidated.

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