

Economic Reconversion of Mining Rural Sites in the Brad Basin during the Transition Period (1990–2016)

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Introduction

THE FALL of the communist system in Romania at the end of 1989 triggered, at the level of society, a major inertial wave that generated deep mutations in political, economic and social terms (Benedek, 2004). The elimination of the ideological restrictions, the constraints of the nationalized economy and the rigid social norms specific to the previous period, led to a massive and total reorientation of the social system. The capitalist free-market economy began to operate, with all the advantages and shortcomings. Although the change of a political system with another occurred suddenly, the shift from one type of economy to a totally different type was made in a crude manner, in the sense of the rapid destruction of the nationalized economic structures and the slow emergence, with great difficulty and delay, of the new capitalist ones. Thus emerged the temporal sequence called the “transition period,” in which the paradigms, strategies and visions of development of the old totalitarian regime were totally removed, but without immediately putting in their place something more productive, more effective, or more efficient.

The political and social convulsions at the beginning of the mentioned period, the lack of a clear vision of the way ahead, the lack of managerial experience of the authorities, the disturbance of the regional political matrix and so on lasted for a quarter of a century, an ambiguous period that had economic and social costs which are hard to imagine. It is the period in which Romania became unindustrialized and unagriculturalized (Popescu, 2000; Otiman, 2012), when tourism showed a clear decline, living standards considerably decreased and unemployment rose due to the drastic reduction of jobs. The immediate consequence was the increase of the external migration of the young and mature pop-

* This study presents some of the results of the project DISRUR/14-AUF: “Demographic Disparities in Rural Areas.” Writing this paper was possible due to the financial support provided under the PN III Programme/Sub-programme 3.1. Bilateral/multilateral/Module AUF-RO.

ulation. Only between 1989 and 1992, the population of the country decreased by 420 000 people, also because of a drop in the birth rate, from 16 ‰ to 11.4 ‰ (Violette Rey, 1994). This phenomenon continued at a galloping pace in the next period. In 2013, according to official statistics, two European countries, Italy and Spain, registered more than 2 million Romanian residents each. Similar figures should be added for the Romanians residing in Germany, Great Britain, France, Portugal, the USA, Canada, etc.

In this context, a case study on a micro-region in the Apuseni Mountains, the one polarized by the city of Brad (David, 2010), illustrates with information and punctual aspects the impact of a phenomenon which manifested itself at national level, and especially its depth, and through it the damage inflicted on the territorial system, on its capillaries (interstices). The issues are all the more illustrative as they are focused on mining, the branch of the industry that suffered the most during the transition period, as activities stopped in the absolute majority of the mining units, in about 560 mines. The magnitude of this phenomenon can easily be deduced by comparing only two figures, for the population employed in the field of mining at national level, before 1990 (350 000 persons), in 2002, 68 800 and in 2015 (57400). It was a reduction by 83.6%, which in fact reflects the bankruptcy of Romanian mining during that period.

Methodology

THE ECONOMIC and social changes of the transition period have affected the entire Romanian society. Their magnitude and specificity differs from case to case. This study, based on the employed population's indicators, illustrates the dynamics of the disintegration of an economic micro-system based on gold and silver mining. Field investigations, interviews with laid-off persons, interviews with local authorities, and photographic documentation are means of highlighting the analyzed phenomenon.

Also, starting from the polarizing function of urban centers, this study seeks to show the spatial relations between Brad City and its surrounding rural areas.

Economic and Social Mutations in The Mining Settlements of The Brad Basin

THE ECONOMIC profile of most settlements in the Brad Basin was marked, prior to 1990, by the presence of intense mining activities of the gold-silver deposits in the southwestern extremity of the "golden quadrangle" of the Apuseni Mountains. We are considering the *Brad-Săcărâmb* sector, where the golden fields of Barza, Caraci, Săcărâmb, Căinel-Hărțăgani, Draica, Hondol, Băița-Crăciunești, Bucuresci, Vălișoara, Troița-Făerag, and Cordurea-Cerburea are located (Ianovici et al. 1969, 1976). The practice of gold extraction dates back to Antiquity, as evidenced by the Roman galleries of Musariu. This strengthened the sector in question by giving it not only a tradition but also an organic interrelation with the other forms of economic capitalization of local resources (agriculture, forestry, and tourism).

In the abovementioned metal mining fields, intensive exploitation and exploration activities have taken place since the Antiquity. Only in the Barza area the underground gallery system exceeds 500 km (Verdeş, 2015, p. 135; Haiduc, 1940). Therefore one may speak of an authentic “mining bazaar” developed in the golden hills of Stănjia (with mines at Valea Tisei, Borzeşti, Dealu Ungurului), Barza, Ruda Barza, Musariu, Brădişor, Valea Morii, Ţebea, Caraci, Rovina, etc. However, there are also quarries, such as the impressive ones at Valea Arsului and Caraci. There is also a surface and underground infrastructure in place: funicular, railway and roads for the transport of ore, tailing dumps, deposits, pipelines, wells and mining galleries, etc.

In Ţebea, beside the exploitation of the gold deposit at Măgura Ţebeii, an intensive coal mining (brown coal) extraction activity was carried out for fueling the Crişcior Thermal Power Plant. This was finally decommissioned in 1999, when work ceased in the quarries and the mines were closed down.

The elimination of mining as the main activity of the inhabitants of the Brad micro-region took place between 1990 and 2006. The negative evolution of the mining field is illustratively marked by the changes in the number of employees at Brad Mining Works: 5,719 in 1990, 3,314 in 1997 and only 55 in 2010, the latter having the task of closing the existing mines (Verdeş, 2015). One should note the significant decrease of the population employed in the mining sector even before 1997, when the *Government's Emergency Decree* 51 of 18 September regarding the closure of unprofitable mines was implemented. We consider that an important role in the bankruptcy of the gold and silver mining exploitations in Romania, including those in the Brad region, fully owned by the state, was also played by the unexplained and erroneous decision of the National Bank, in 2000, not to acquire gold from domestic production.

The communes directly polarized by Brad City, deeply affected economically and socially by the cessation of mining activities, are Crişcior (Valea Arsului, Figure 3), Bucuresci, Buceş (Stănjia, După Piatră), Ribiţa, Baia de Criş and Luncoiu de Jos, because most of the pits were located there. However, the impact was much broader, because in the peak period, around 1990, the need for labor force was also satisfied by commuters which lived in more distant communes (Blăjeni, Bulzeşti, Tomeşti, Vaţa de Jos, Vălişoara). The Emergency Decree no. 24/1998 declared the territory polarized by Brad City a disadvantaged area, then enacted by Decision no. 991 of 31 December 1998. This status was assigned to mono-industrial localities affected by deindustrialization and high unemployment.

The analysis of the data in the table below highlights the dynamics of the economic and social phenomena and the modest, regulatory role of Brad City. Thus, for the Crişcior commune, on whose territory the numerous mines of the Barza exploitation complex are located, but especially for the Gurabarza ore preparation plant, there is a decreasing trend for the number of employees in the 1991-2005 period, which can be correlated with the decline of activity in those units. The threshold value in 2006 (only 759 employees) coincides with the total cessation of mining activities. Similarly, for Baia de Criş commune, where the coal exploitations of Ţebea and the gold mines of Caraci were located, the decline to more than half of the number of employees took place earlier, in 1999, when the coal mine was closed.

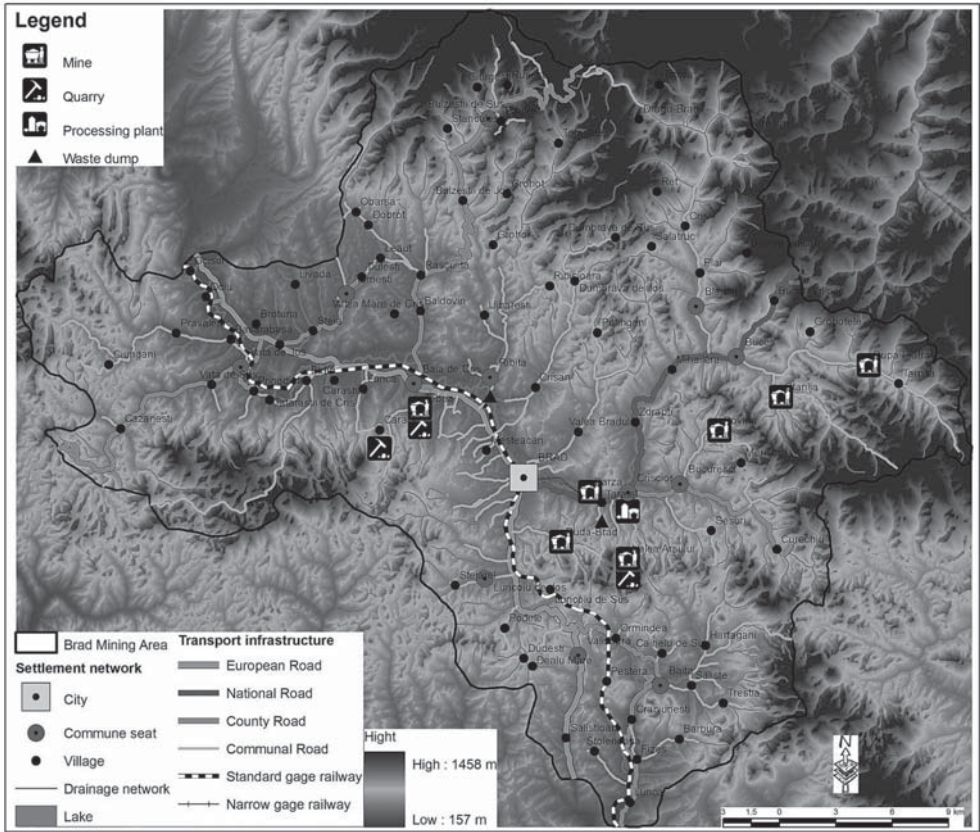


FIGURE 1. Brad mining area

An unusual situation occurred in Ribîța commune, which experienced a massive increase in the number of employees starting with 2002 (591 persons), reaching a peak in 2005 (1,384 persons). This was determined by the location there of a subsidiary of Key Safety Systems Ro, a company specialized in the production of car seat-belts and steering wheels.

TABLE 1. The average number of employees between 1991 and 2015

| Locality | 1991 | 1999 | 2002 | 2005 | 2006 | 2015 |
|----------------|-------|-------|-------|-------|-------|-------|
| Brad | 5.497 | 4.162 | 4.405 | 4.660 | 5.199 | 4.088 |
| Baia de Criș | 789 | 295 | 420 | 349 | 472 | 63 |
| Buceș | 107 | 142 | 170 | 128 | 472 | 193 |
| București | 51 | 45 | 55 | 43 | 44 | 43 |
| Crișcior | 6.124 | 2.305 | 3.386 | 2.531 | 759 | 375 |
| Luncoiu de Jos | 414 | 118 | 94 | 164 | 245 | 43 |
| Ribîța | 59 | 83 | 591 | 1.384 | 1.374 | 1.125 |

Throughout this transition period, Brad City presented a sinuous, slightly decreasing trend in the number of employed people. The sharp increases in 1994 (8,948 employees), 2007 (5,692) and 2008 (6,032), above the average registered in 1991 (the year of reference), were recorded in the context of a negative demographic trend and amid increased emigration, and showed the role of the city as an absorption valve of the surplus labor force in the surrounding rural areas generated by the collapse of mining. The practice of other activities, especially in the sphere of trade and services, for which the urban environment is more favorable in terms of demand, was the basis for a quick but temporary and circumstantial reconversion.

The closure of the mines and the destruction of the entire mining infrastructure (including the Gura Barza ore primary processing plant and its coal-fired power plant) had a huge impact on the entire chain of transport, metallurgy and mining machinery industry, as well as specialized services (Wollmann 2010, 2011; Verdeș, 2015).

The resilience of the social system to the impact of the disappearance of mining passed through a phase of confusion and uncertainty generated by the psychological shock produced by the complete cessation of a traditional, ancestral occupation, in which successive generations of the inhabitants of Zarand Land had been trained. This was an activity that the population has been specialized in and ensured its daily safety and well-being. The region was mono-industrial and the disappearance of mining led the authorities to design the region as a “disadvantaged area.”

The adaptation of the socio-system to post-mining economic progress followed two pathways: reconversion through a return to the past and reconversion by developing innovative activities.

Socio-Economic Reconversion Through A Return To The Past

THE DISAPPEARANCE of mining as an economic branch meant, at the same time, its disappearance as an occupation and as a dominant element of the economic structure of all rural and urban settlements in the Brad area. It was a phenomenon that was running at a high pace due to the lack of alternatives, of its immediate substitution with other activities likely to absorb the available workforce and provide a source of income for the inhabitants.

Against this background, the first reaction of the inhabitants of the analyzed unit was the return to the past, i.e. the return to the ancient subsistence occupations, such as traditional farming, primary exploitation and commercialization of wood, apiculture etc.

The situation of Crișcior commune is convincing in this respect. There the intense mining activity in the Barza field, supported by 6,124 employees in 1991, was replaced by 12 sheep farms that harness the pastoral potential of the mountain slopes, by ever-expanding apicultural activities (13 bee gardens), and by wood exploitation for the production of timber. Tourism is in an early stage of development, and the three func-

tional guest houses are the first in a field which has numerous opportunities for development (mountain recreational tourism, hunting tourism, rural tourism, cultural tourism). However it will be deprived of valuable industrial heritage elements, as the lack of vision of the decision-makers allowed them to be destroyed or deteriorated. The drastic reduction in the number of employees in the commune (only 375 in 2015), most of them working in administration and social services, reflects the current state of the local economy and the dominant agricultural profile of the composing villages.

There are similar situations to be found in all the communes of the Brad micro-region (Buceș, Baia de Criș, Ribița, Vața de Jos) where agriculture was reactivated as an activity, still benefiting from a labor force represented by the elderly population, generally laid off from mining and not included in the migratory flows mainly made up of the young and mature population.

Reconversion By Developing Innovative Activities

THIS IS particularly characteristic of the only urban center of the micro-region, the city of Brad. Innovation concerns both the implantation of new activities into the occupational structure of established fields, such as industry, as well as the initiation of new activities, with many examples in the field of services.

Thus, in the industrial field, one should notice the opening of the Key Safety Systems Ro plant and of three other textile companies, App Textil SA, Teba Brand Industry, and Fabri SRL (Drăgan, 2013), as well as the restructuring of production in the Central Workshops and Crișcior with a focus on the maintenance of the railway lines with a tourist function (“Mocănița”).

For Brad city, the orientation towards tourism activities can be considered an innovative initiative (David, 2008), and there are two hotels and a growing number of guest houses. The intensification of the concerns regarding the display of the tourism heritage (primarily the well-known Gold Museum, with more than 1,300 gold exhibits, some unique in Europe), the improvement of the access infrastructure, the enrichment in content of the local cultural events are favorable premises for the development of this economic branch.

The explosion of trade and services after the fall of communism is felt in the economic landscape of the city through the diversification of commercial units, the emergence of supermarkets and social services (Gavra 2013). In terms of services, a visible increase has been experienced by the financial ones, and no less than five banks opened branches in Brad (BCR-Erste, BT, BRD, CEC, and Banc Post).

In the communes, innovation and its dissemination in the territory is slower. It also manifests itself in the tourism sector, as guest houses and holiday houses are not so much present in the countryside at Crișcior, Tebea, Baia de Criș, or Buceș.

However, there are also initiatives in the field of production, such as the Ribița auto accessories subsidiary or the small woodworking company in Buceș. In the same locality attention is paid both to the forest fruit collection center and especially to the gold mining and alluvial deposits processing center.

An assessment of the degree of economic reconversion of the Brad micro-region is still premature, because the phenomenon is ongoing. To highlight the reached level, one should necessarily consider the starting point: if in 1990 the mining sector alone provided 5,719 jobs, in 2010 the main 27 employers in the Brad area had a total of only 4,006 employees, of which only 674 are former miners (Verdeș, 2015, page 234).

The evolution of the number of employees in Brad City reveals a downward trend specific to the absolute majority of urban centers in Romania and has similar causes: the deindustrialization and the migration for work abroad of a segment of the young and mature population.

Conclusions

AFTER 1990, the Brad mining area followed the same downward trend specific to all mining activities across the country:

- Decommissioning of mines and degradation of the local mining and processing infrastructure;
- The labor force engaged in mining activities has been drastically reduced, to just a few people having the task of closing and preserving the last production units;
- The functional reconversion of settlements after the disappearance of the dominant mining activity is under way, at a slow and circumstantial pace and orientation;
- The return to the old agricultural and forestry activities is visible in most villages of the micro-region;
- Tourism, an economic branch for which the area reveals a potential for development, is in its initial stage;
- Brad City preserves its polarizing function through commercial, service, educational, and healthcare activities.



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Abstract

Economic Reconversion Of Mining Rural Sites In The Brad Basin During The Transition Period (1990-2016)

The settlements belonging to Brad, Baia de Criș, Buceș, București and Crișcior administrative units, located in the Brad Basin, have developed a predominantly mining economic profile. Mining activity practically ceased in the region in 2006 when all mines were closed, going into conservation. The city of Brad changed its nature from its previous mining function before 1989 to its present commercial and service function. The tourist function is also enhanced by the diversification of accommodation and public catering units. For rural settlements, economic reconversion is slow and precarious as mining activities have been only partially substituted by agriculture or forestry, with a limited development potential due to the relatively low quality and quantity of soil and timber resources. Tourism is in its early stage of development, marked by the emergence of accommodation facilities and tourist information points.

Keywords

economic profile, reconversion, mining, Brad Basin, tourism, transition