

## EW OPPORTUNITIES FOR THE AREAS WITH MINING INDUSTRY ON THE WANE

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**ABSTRACT:** The mining industry is in a very difficult situation in Romania. Job losses affected large areas with mines on the wane, since the mining industry was overdeveloped in the communist era. Therefore, new, modern and ecological economical alternatives have to be developed nowadays.

### НОВИ ВЪЗМОЖНОСТИ ЗА РАЗВИТИЕ НА РАЙОНИТЕ СЪС ЗАТИХВАЩИ ФУНКЦИИ НА МИННАТА ПРОМИШЛЕНОСТ

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**РЕЗЮМЕ:** В настоящия момент минната промишленост в Румъния се намира в много трудна ситуация. Безработицата засяга големи минни райони със затихващи функции, докато по време на комунистическия режим минната промишленост бе прекалено развита. Ето защо при създаването се ситуация трябва да се търсят и развиват нови, модерни и еколого-икономически и целесъобразни алтернативи.

## INTRODUCTION

As a result of the major job losses that took place in the National Pitcoal Company (Compania Nationala a Huilei – CNH – Petrosani, Romania), the number of the employees was reduced from 45.141 at the beginning of 1997 to 13.000 at the end of 2005 and 1.200 more are foreseen to leave the company in 2006. Those who retired represent only a minority, most of those who left CNH became unemployed. By the time the system of mass-dismissal with reparatory payment was introduced no alternative new jobs were created, considering that many of the came in the Jiu Valley from other regions of the country and that those people would try to go back to the places of origin. This supposition was not realistic and the economic difficulties arose in short time for the unemployed who remained in Jiu Valley<sup>1</sup>. These problems had two reasons:

a) the amount of money received as compensatory payments is insufficient to ensure the future of the unemployed;

b) the money received as compensatory payments was mismanaged by the owners, as they were used mainly to buy goods and even if some very few persons tried to start a business, the lack of managerial skills caused that business to go bankrupt very fast.

A realistic analysis would show that the number of persons working at CNH has decreased by more than 70% (about 32.000 persons during 1997-2005) and this is a very serious problem for Jiu Valley. No matter how we put the problem, the Jiu Valley hasn't the potential to create new jobs for all these persons. But this doesn't mean that the Jiu Valley has no future, because, beside the weaknesses there are opportunities as well.

## POSSIBILITIES FOR ECONOMIC DEVELOPMENT IN JIU VALLEY

Although there are some opinions that the Jiu Valley is an isolated area, I do not agree on this; the area is crossed by two major ways (railway and road) that are connecting Transylvania with the south of Romania and there are two major towns nearby: Deva (about 100 km north) and Târgu Jiu (about 60 km south). The traffic on this way is very intense and the only real problem is the poor condition of the roads which require massive investments and consolidations, due to the fact that heavy vehicles use it. Simply being on a way with high-traffic and great economic importance can ensure the future of our region.

The tourism, as an alternative, has no potential to become a significant international center. Once again, the poor infrastructure is the main problem. No matter the beauty of the sightseeing, if the roads, access to the skiing slopes, to the chalets, the chalets themselves and generally that infrastructure are not at a high standard, the tourism will never be developed to be important internationally.

Also, information centers must be placed at the north and south entrances in the near the railway station in order to be easy accessible to the tourists willing to visit our region.

The agriculture has no option but cattle farming and usually this is done in small domestic farms. As a result, the food industry can also be represented only by small and medium size enterprises (SME).

Wood industry is a profitable alternative, but if the woods are irrationally exploited (without re-forestation programmes) the damages can be unpredictable: floods, land slides etc. Due to

the importance of this resource, it needs a superior utilization (for instance for producing furniture).

Another perspective is civil engineering, since the economic reconversion requires a lot of constructing activities. Even new, modern type of materials can be produced and the specialists from the University in Petrosani have made technologically possible that the ashes from the Paroseni Thermal Power Plant to be used for producing bricks<sup>3</sup>. Producing bricks by using such materials would be benefic to the environment, too.

Another opportunity is offered by the buildings that belonged to the CNH and now are out of use. Some of these are in good condition and have the necessary infrastructure (phone, electricity, water, sewerage, and access ways) in order to be used by the potential investors with a minimum of investment. By the Decision of Government (HG) no 1169/2004 a complete list of these buildings and constructions has been made available. All of them became property of the local councils and the local councils are responsible for their management (selling, renting etc).

The ecologisation of the Jiu Valley is another very important issue. A full scale programme to encompass the whole region is required. Ecological surfaces and clear legal status of these surfaces are *sine qua non* conditions for further development, since nobody is willing to invest in areas that are polluted or have an uncertain legal status.

Of course, before taking the decision related to the possible alternative use of such buildings a professional analysis must be done in order to find out if it is more profitable to re-use that building or to demolish it and build a new one, suitable to the new destination.

Another reason for re-using the existing buildings is that the Jiu Valley is limited as surface but the surrounding mountains. It cannot expand, and therefore we must focus on an intensive use of the existing surfaces. Also, access to the national road network is possible from all these locations, even if some of the ways are not in a good state.

The Jiu Valley needs an integrated development policy, taking into account the needs of the local community, and the whole region should be considered as one town, in which the actual towns to represent sectors. This would make the policy more coherent.

Also, when bids are organized in order to sell land for investments, it should not be based on the price per square meter of land, but on the number of new jobs foreseen to be created. Prior to such an event, meetings with business people should be taken very seriously.

The development of a region is mainly guaranteed by two ways: natural resources and/or vicinity of important intersection of communication ways. In Jiu Valley, the main resource (coal) is almost exhausted for the technologies we have now. This is why we consider that in future the increase of the accessibility index will be the chance for developing the area. These routes are:

- Târgu Jiu – Deva;
- Brezoi – Herculane;
- in future the Vulcan – Tismana tunnel.

In order to achieve the integrated approach for the development of the Jiu Valley, we consider useful to apply a logical frame similar to the ones used within the projects financed by the EU<sup>2</sup> (see Table 1):

Table 1. Logical framework for development of the Jiu Valley region

	<b>Intervention logic</b>	<b>Objectively verifiable indicators of achievement</b>	<b>Sources and means of verification</b>	<b>Assumptions</b>
Overall objectives	<ul style="list-style-type: none"> <li>▶ Development of alternative activities in the Jiu Valley to create new jobs as the number of jobs in the mining sector is decreasing.</li> </ul>	<ul style="list-style-type: none"> <li>▶ New jobs and new business will be created</li> </ul>	<ul style="list-style-type: none"> <li>▶ Register of Commerce</li> <li>▶ Labour Agency</li> <li>▶ Information from the press</li> </ul>	<ul style="list-style-type: none"> <li>▶ The desire of the inhabitants of the Jiu Valley to continue their lives in the same region after the wane of the mining industry</li> <li>▶ Allocation of important funds to implement programmes concerning the ecological issues and rehabilitation of the infrastructure</li> </ul>
Specific objective	<ul style="list-style-type: none"> <li>▶ Ecologisation of the surfaces affected by the industrial activity</li> <li>▶ Elucidation of the legal status of the lands</li> <li>▶ Rehabilitation of the access ways and utilities</li> <li>▶ Aggressive publicity for the Jiu Valley</li> <li>▶ Use of the useful minerals in the sterile heaps</li> <li>▶ Use of the mine gas from the active as well as from the closed mines</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ecologized surfaces handed over to the local communities / to the nature</li> <li>▶ Enhancing the purity of the air</li> <li>▶ m<sup>3</sup> of gas used for the economy</li> <li>▶ direct income from the use of the mine gas</li> <li>▶ Length of the access ways rehabilitated</li> <li>▶ Various buildings and areas made available for business</li> </ul>	<ul style="list-style-type: none"> <li>▶ Environmental reports</li> <li>▶ Reports from the CNH and local authorities</li> <li>▶ Information reports from the Register of Commerce</li> </ul>	<p>Risks:</p> <ul style="list-style-type: none"> <li>▶ Possibility of finance shortage</li> <li>▶ Lack of unity in actions</li> </ul>
Expected results	<ul style="list-style-type: none"> <li>▶ The companies working in the Jiu Valley will thrive and thus new jobs will be offered to the population</li> <li>▶ New business will be created</li> <li>▶ The health of the population will be better due to a clean environment</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of new business</li> <li>▶ Number of new jobs</li> </ul>	<ul style="list-style-type: none"> <li>▶ Reports of the Register of Commerce and the Labour Agency</li> <li>▶ Reports of the local authorities</li> <li>▶ questioning the inhabitants of the Jiu Valley</li> </ul>	<ul style="list-style-type: none"> <li>▶ Good and effective laws</li> <li>▶ Correct and complete information of the public outside the Jiu Valley</li> </ul>

Activities	<ul style="list-style-type: none"> <li>▶ Evidence of all the surfaces that need ecologization, as well of the negative effects that need to be removed</li> <li>▶ Evidence of the re-usable buildings and of the works to be done in order to rehabilitate them</li> <li>▶ Evidence of the transportation ways (e.g. roads) that need rehabilitation works</li> <li>▶ Evidence of the utilities (water, power, sewerage) to be rehabilitated</li> <li>▶ Evidence of the available accommodation and of the improvements that need to be done</li> </ul>	<p>Means:</p> <ul style="list-style-type: none"> <li>▶ Companies specialized in civil engineering and building</li> <li>▶ Support from the local authorities</li> </ul>	<ul style="list-style-type: none"> <li>▶ Available statistics.</li> <li>▶ Evaluations done by the actors interested and involved</li> </ul>	<ul style="list-style-type: none"> <li>▶ Agreement between the interested actors (companies, business persons, local authorities) in order to carry on a joint actions</li> </ul>
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## ALTERNATIVE STRATEGY FOR MINING IN THE JIU VALLEY

First of all we must underline that the mines will continue to be a part of the economy of the Jiu Valley, even if in the year 2011 the subsidies for the mining industries will cease in Romania and the mines will have to operate on an open market in competition with other more experienced countries.

It is obvious that the Jiu Valley mines need investments to re-technologies' in order to reach performances similar to the west European countries. This is why in the year 2006 the Jiu Valley mines needs to be re-organized.

Most likely, the large mining company CNH will be eliminated and will be replaced by a new form of organization of the viable mines<sup>4</sup>.

This could mean that the new company would start the activity without debts and would have the chance to get credits for investments or even European development funds. On the other side, this could imply that the miners would lose some of the advantages they have at present, especially the retired ones.

We consider that the strategy of the mining industry in the Jiu Valley should focus on modernizing the mines that are/have chances to become viable. A chance for the future of mining is considered to be the integrated complexes like the Itochu Kopex project, involving the mines of Paroşeni, Vulcan, Livezeni, Aninoasa, the Coroişti coal processing plant and the power plant from Paroşeni.

Also, it is very useful to start up a company specialized in ecologizing and rehabilitation of land. Mining and coal processing had a major negative impact on the environment. A company to rehabilitate the land in order to make it available and suitable for alternative activities would be crucial for the future of the Jiu Valley. Such a company should rely on the specialists from CNH, INSEMEX and ICPM (two well known

design institutes with a very rich experience in mining research). Besides the ecological aspects, the legal status of the land must be well determined and infrastructure is available.

Regarding the closure of mines, the usual issues are the ecological ones, post-closure monitoring, but not the post closure utilization. Mines continue to produce valuable raw material after closure: mine gas. Using these resources means:

- ecologizing the area (CH<sub>4</sub> is a gas with a strong greenhouse effect and will no longer be eliminated in the atmosphere);
- safety (potential fires are avoided at the old mining sites);
- mine gas will be an alternative unconventional fuel;

the activity at the mines can continue, no longer for coal, but for gas, which means that the mines will continue to produce money and some jobs – of course, they will be less as during the coal exploitation. In fact there is already an operational power plant that is based on the mine gas near the Lupeni mine.

## CONCLUSIONS

Although the mining industry in the Jiu Valley, Romania, is on the wane and, as a result, the economic situation is very difficult, there are enough possibilities for the local community to continue the development "at home". New activities, some of them even based on the assets that can get alternative use after the closure of mines must be developed. The core issues are the ecologization and making clear the legal status of the land, in order to attract new investments. The position of the area known as the Jiu Valley at the crossing of important

national routes is another advantage that must be carefully put in use in order to ensure the sustainability of the region.

\*\*\*, *Decision of Government no. 615/2004*

\*\*\*, *www.infoeuropa.ro*

\*\*\*, *The Mining Review no. 9-10/2003*

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