

Possibilities for Sustainable Development of the Jiu Valley Region

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Abstract: The sustainable development is more and more actual. The principles of the sustainability must be at the foundation of the development of any region in order to be successful. Successful examples from other countries can be studied and, of course, adapted to the real conditions of the target area, taking into consideration the specific of the country and the region.

Key words: rehabilitation, development concept, landscape, logical frame.

1. INTRODUCTION

The rehabilitation of the mining regions must provide a sustainable development, i.e. a valuable living and landscape area with multiple options for use.

Redevelopment efforts must be oriented towards eliminating hazards and permanently ensuring public safety, developing a post-mining landscape with multiple options for use and an acceptable design which requires no secondary treatment. The former mining area has to be developed into a self-sufficient landscape, having trans-regional significance for tourism. At the same time, issues related to flood protection, leisure and recreation, nature, landscape and additional forest area must be resolved in a efficient manner and based on a clear-cut functional division between areas intensively used and areas sensitive to noise. Measures related to water should focus on the re-creation of a stable and mostly self-regulating regional water balance.

2. PRESENT DAY THE SITUATION IN THE JIU VALLEY

Major jobs loss took place in the National Pit Coal Company (Compania Nationala a Huilei – CNH – Petroșani, Romania) after the year 1997 and the number of the employees was reduced from 45.141 at the beginning of 1997 to about 4.000 in 2017. Few employees retired, most of those who left CNH became unemployed. A system of mass-dismissal with reparatory payment was introduced, but no alternative new jobs were created,

considering that many of them 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 unrealistic and the economic difficulties for the unemployed who remained in Jiu Valley appeared short time after. These problems were caused by two reasons:

“a) the amount of money received as compensatory payments was not sufficient 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 those business to go bankrupt very fast.”¹

A realistic analysis would show that the number of persons working at CNH has decreased by more than 96% causing major problems for the Jiu Valley. It is a fact that Jiu Valley hasn't the potential to create new jobs for all these persons. But the Jiu Valley may have a future, because, beside its weaknesses it has opportunities as well.

3. REQUIREMENTS FOR A SUSTAINABLE DEVELOPMENT OF THE JIU VALLEY REGION

The facilities for winter sports, leisure and recreation have to be improved, extended and

¹ R. Munteanu *How to develop a former mining area in a sustainable manner*, Annals of the University of Petrosani, 2010

developed to upgrade the recreational potential of this area of trans-regional significance.

A tourist water association with water-bound options for recreation at the Campu lui Neag lake can be combined in a synergic way with the mountain tourism in the western part of the Jiu Valley.

The protection of landscape, nature and species must be guaranteed in the Parâng and Retezat mountains.

Traffic access needs to be improved essentially and targeted to provide large-area traffic connections, demand-driven traffic development of recreational areas, re-building of devastated or interrupted historical traffic routes and the creation of a multi-use biking and hiking trail network.

“Moreover, the general rehabilitation plan must contain stipulations and goals on the following items²:

- ▶ the geographic position (including boundaries) of the rehabilitation area,
- ▶ soil protection and material disposition,
- ▶ slope remediation and landscaping,
- ▶ areas of potential contamination, contaminated sites and waste dumps,
- ▶ regional water balance,
- ▶ preventive flood protection,
- ▶ noise and dust protection,
- ▶ fishing,
- ▶ recreation,
- ▶ agriculture,
- ▶ increase in forest area and forest protection,
- ▶ nature and landscape and
- ▶ traffic infrastructure and local public transport.”

The plan has to have clear purposes and provide reasons for goal setting while detailed rehabilitation measures and methods must be included in the final operating plans of the Jiu Valley mining area. Also, the general rehabilitation plan should contain some priority areas that must remain unchanged. A good general rehabilitation plan comprises priority areas for ²:

- ▶ increased forest area,
- ▶ forest protection,
- ▶ nature and landscape (succession areas),
- ▶ nature and landscape (forest areas),
- ▶ nature and landscape (water areas),
- ▶ recreation

In addition, the plan also must comprise so-called reserve areas, where to a particular type of use should be given special weight compared to other

² R. Munteanu *How to develop a former mining area in a sustainable manner*, Annals of the University of Petroșani, 2010

options. The reserved areas in the general rehabilitation plan comprise areas for:

- ▶ enlarged forest area,
- ▶ agriculture (mostly shepherding),
- ▶ nature and landscape (land),
- ▶ nature and landscape (lakes),
- ▶ recreation

It is important that the final operating plan the environmental needs be harmonized with the economic needs of the society. This can be done by using a regional development concept.

In order to achieve the integrated approach for the development of the Jiu Valley, we consider useful to apply a logical frame (see Table 1).

A development concept for the Jiu Valley can be expressed as follows:” The Jiu Valley is to be taken into consideration as a single administrative unit, the social, economic and environmental rehabilitation process will be unitary implemented and under these circumstances the tradition and the novelty, with new ideas, interpenetrate for a sustainable development”³.

4. CONCLUSIONS

Even if the mining industry in the Jiu Valley, Romania, is on the wane, causing a very difficult economic situation, the region offers many possibilities for the local community to develop by itself. New activities can and have to be developed, but the key issues that are to be targeted in order to attract new investments are the ecologic rehabilitation and clarifying the legal status of the land. The position of Jiu Valley at the crossing of important national routes is an advantage to be used in order to ensure the sustainability of the region.

No one has the key to success in such a sensitive issue, because there are a lot of factors involved, a lot of specific problems arise during the process. Successful examples from other regions or countries can and must be studied, as they are likely to offer good ideas, but in the end the local community and the local authorities must decide what is best, what do they want to do with their lives in the future. They must have a vision and start from a concept of development, as to have a coherent strategy and implement it successfully.

Different communities can work together in order to find the best ways to develop in the post mining era, since they have similar problems to deal with.

³ R. Munteanu *Analiza posibilităților de dezvoltare a unor activități economice alternative în condițiile restructurării mineritului din Valea Jiului*, PhD Thesis, Petroșani, 2007

Table 1. Logical framework for development of the Jiu Valley region⁴

	Intervention logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
Overall objectives	<ul style="list-style-type: none"> ▶ Development of alternative activities in the Jiu Valley to create new jobs as the number of jobs in the mining sector is decreasing. 	<ul style="list-style-type: none"> ▶ New jobs and new business will be created 	<ul style="list-style-type: none"> ▶ Register of Commerce ▶ Labour Agency ▶ Information from the press 	<ul style="list-style-type: none"> ▶ The desire of the inhabitants of the Jiu Valley to continue their lives in the same region after the wane of the mining industry ▶ Allocation of important funds to implement programmes concerning the ecological issues and rehabilitation of the infrastructure
Specific objective	<ul style="list-style-type: none"> ▶ Ecologisation of the surfaces affected by the industrial activity ▶ Elucidation of the legal status of the lands ▶ Rehabilitation of the access ways and utilities ▶ Aggressive publicity for the Jiu Valley ▶ Use of the usefull minerals inthe sterile heaps ▶ Use of the mine gas fro the active as well as from the closed mines 	<ul style="list-style-type: none"> ▶ Ecologized surfaces handed over to the local communities / to the nature ▶ Enhancing the purity of the air ▶ m³ of gas used for the economy ▶ direct income from the use of the mine gas ▶ Length of the access ways rehabilitated ▶ Various buildings and areas made available for business 	<ul style="list-style-type: none"> ▶ Environmental reports ▶ Reports from the CNH and local authorities ▶ Information reports from the Register of Commerce 	Risks: <ul style="list-style-type: none"> ▶ Possibility of finance shortage ▶ Lack of unity in actions
Expected results	<ul style="list-style-type: none"> ▶ The companies working in the Jiu Valley will thrive and thus new jobs will be offered to the population ▶ New business will be created ▶ The health of the population will be better due to a clean environment 	<ul style="list-style-type: none"> ▶ Number of new bussiness ▶ Number of new jobs 	<ul style="list-style-type: none"> ▶ Reports of the Register of Commerce and the Labour Agency ▶ Reports of the local authorities ▶ questioning the inhabitants of the Jiu Valley 	<ul style="list-style-type: none"> ▶ Good and effective laws ▶ Correct and complete information of the public outside the Jiu Valley
Activities	<ul style="list-style-type: none"> ▶ Evidence of all the surfaces that need ecologization, as well of the negative effects that need to be 	Means: <ul style="list-style-type: none"> ▶ Companies specialised in civil engineering and building 	<ul style="list-style-type: none"> ▶ Available statistics. ▶ Evaluations done by the actors interested and 	<ul style="list-style-type: none"> ▶ Agreement between the interested actors (companies, business persons, local

⁴ R. Munteanu *How to develop a former mining area in a sustainable manner*, Annals of the University of Petrosani, 2010

	<p>removed</p> <ul style="list-style-type: none"> ▶ Evidence of the re-usable buildings and of the works to be done in order to rehabilitate them ▶ Evidence of the transportation ways (e.g. roads) that need rehabilitation works ▶ Evidence of the utilities (water, power, sewerage) to be rehabilitated ▶ Evidence of the available accomodation and of the improvements that need to be done 	<p>▶ Support from the local authorities</p>	<p>involved</p>	<p>authorities) in order to carry on a joint actions</p>
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