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Post-Mining Regions in Central Europe

Problems, Potentials, Possibilities



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Preface

Structural change in mining districts is a complex process, challenging cities, regions and governments all over the world. It comprises economic, social, ecological, and cultural changes. This volume deals with such regions in Central Europe.

In Western Europe, the subject has been a concern of political discussion and scientific reflection for some 50 years. The debate has mainly focused on major coal and steel regions like North-East England and Wales (Great Britain), Wallonia and Limburg (Belgium), Nord-Pas-de-Calais and Lorraine (France), Ruhr and Saar (Germany), and Asturias (Spain). In the affected areas the end of mining has provoked the overall decline of industry. The impacts have been far reaching, bringing economic, social, and ecological crisis to vast regions. Overcoming the shock has proved a protracted and painful process. Given the economic and political importance of the regions mentioned, regeneration has been a task of "national" importance, challenging governments, trade unions and big enterprises. Smaller mining regions have rarely attracted such attention, though the effects of decline have been no less drastic there.

In the former communist countries of Central and Eastern Europe, regime change in 1989/90 brought a radical turning point. Many old industries had survived till then in the autarkic economies of these states. When the system collapsed, many industries faced ruin and cities and regions were plunged into crisis. In Eastern European countries, too, certain former flagship regions of the coal and steel industry attracted most attention: Upper Silesia (Poland), Ostrava-Karvina Region (Czech Republic), Valea Jiului (Romania), Donezkyj Bassejn (Ukraine). Furthermore, the lignite industry in the Leipzig-Halle and Lusatian Districts (Eastern Germany) as well in the Bohemian Basin (Czech Republic) suffered rapid decline. The impacts resembled those in Western countries. But there was an important difference: the old industrial regions in the East had to master change in a society in transition with a weak overall economy and less continuity. Today we can look back on 20 years of experience in these countries.

How relevant is this well-known topic for the early 21st century? Does it make sense to address it at a time when the discussion about the new economy is at its peak? Why do we not use the concepts from the 1980s and 90s to solve recent problems? Or is there reason to call attention to unsolved problems in an atmosphere of political indifference?

This volume seeks answers to these questions. It focuses on the so-called "potentials" of mining regions. These potentials can be defined as legacies of mining which can be exploited and valorised even after mineral extraction has ceased. There are two categories of potential, natural and cultural. Natural potentials are post-mining landscapes, renewable energies and thermal water. Cultural potentials are artificial relicts such as technical structures, buildings and infrastructures, as well as the traditions of miners. It makes sense to distinguish between them because the two categories are valorised differently.

What we describe as potentials differs from "heritage". The latter is seen mainly in the context of "preservation". Of course, the development of post-mining potentials includes heritage aspects such as the use of old mining building as museums. But our view is wider. "Potential" has a progressive connotation. It can be associated with concepts like "innovation" and "modernization". The concept of potential gives a strategic touch to economic restructuring. Moreover, the "potential approach" can easily combine with urban and regional regeneration issues. It fits in with development trends like resource economy, climate adaptation, energy transition, and sustainable development. The concept can also extend to regional identity and tradition. In this sense it can play a progressive role in the communication of political stakeholders.

In contrast to most scientific ventures to date, this volume addresses the problems of mining regions with small and medium-sized towns, mostly situated at the outer and inner peripheries of countries. This spatial category is often limited in general functions. Such areas are sparsely endowed with infrastructure. Particularly lacking are high-quality education facilities like universities and research centres. Small and medium-sized towns are becoming less important as sites for business and industry in many countries. And local authorities generally have little scope for action. Small and medium sized towns have little administrative capacity for strategy building, planning and control. Altogether, politics pays little heed to this type of mining region. There is all the more need to draw greater political attention to them.

With this in mind, the book has three main aims: *first* to describe the situation of post-mining regions with small and medium-sized towns in Central Europe at the beginning of the 21st century; *second* to introduce the "potentials" concept into the scientific discussion on urban and regional regeneration; and third to underline the need for political action by the European Union and national governments to promote change in former mining regions.

The results presented here were obtained in the framework of the project ReSource – Utilisation of post-mining potentials for sustainable re-development in Central European mining cities and regions. It was co-funded by the European Regional Development Fund (ERDF) in accordance with the EU Objective 3 "Territorial cooperation", programme Central Europe. From 2009 to 2012 ten partners worked together to promote urban and regional development in 6 mining regions: the Steirische Eisenstraße (Styrian Iron Route) in Austria, the Czech lignite region Sokolov-východ, the Mansfeld-Südharz copper region and the Zwickau-Oelsnitz coal region in Germany, the brown coal region of Salgótarján in Hungary, and the Zasavje coal

region in Slovenia. Half of these regions are in the post-mining phase. In Styria, Zasavje and Sokolov is mining continuing with longer-term prospects. Nevertheless, in these regions, too, the importance of mining is declining and the economy is in transition. All are affected by change, all are in search of perspectives for development in the post-mining period, and all have a number of potentials they can exploit.

The regions have been accompanied in their efforts by academic partners, both universities and scientific institutes: The Leibniz Institute of Ecological Urban and Regional Development (IOER) Dresden, the Urban Planning Institute of the Republic of Slovenia (UPIRS) Ljubljana, the Institute of Geography and Regional Science of the Karl Franzens University (KFU) Graz, the Institute of Applied and Landscape Ecology of the Mendel University (MENDELU) Brno, the Institute of Geography and Earth Sciences of the Eötvös Loránd University (ELTE) Budapest. An additional partner is the Institute of Geography and Regional Development of the University of Wrocław. Though no Polish region was involved in the ReSource project, Wrocław University has contributed a study of the former Wałbrzych coal region. ReSource symposia in Großräschen/Germany (2009), Leipzig/Germany (2010), Leoben/Austria (2011), and Sokolov/Czech Republic (2011) provided additional expertise on post-mining development from other European and world regions. Discussions among scholars from different theoretical backgrounds with far-reaching experience in structural change proved extremely fruitful. On the one hand, they had an intensive methodological component. In order to compare situations, problems and strategies in the regions under investigation, appropriate algorithms had to be created for common use by all partners and in all regions. Such products of discussion and analysis as the "Road Map", the "Regional Profiles", and the "Strengths-Weaknesses-Opportunities-Threats (SWOT) Reports" have been an important basis for this publication¹. On the other hand, there was a discussion on the theoretical conceptualisation of potentials in the post-mining development, for instance transition, innovation and actor theories. All participants in these discussions can be found as authors in this volume.

A great deal of practical knowledge was generated in discussions with practitioners from the field in ReSource. They included the German county Zwickau as lead partner, the International Building Exhibition Fürst-Pückler-Land (Germany), the Educational Institution of the Saxony-Anhalt Employers' Association (Germany), the »Styrian Iron Route« Regional Association (Austria), the Association of Communes Sokolov-východ (Czech Republic), the Local Self-Government of the Town of Salgótarján (Hungary), and the Regional Development Centre Zasavje (Slovenia). All discussion in project workshops, meetings, and face to face with representatives proved useful.

Part one provides an overview of the state of the art in post-mining development in Europe. It covers and seeks to systematize knowledge in the field since the 1970s. It also aims to place

1 Project reports are available here: <http://www.resource-ce.eu/en/project-results/scientific-support/>

the post-mining discussion in the context of the "potentials approach", examining the notion of post-mining potentials on the basis of the knowledge available on change in mining regions. The first part concludes with a series of questions on the role of post-mining potentials in developing former mining regions. These questions provide orientation for the following parts.

Part two introduces the regions under study. A brief overview of the geographical location and current development trends in all regions is followed by an examination of each in turn. The demographic, economic and employment situations in each region are analysed. The history and mining legacy of each is also described. The main focus is on the factual and institutional aspects of change. Governance constellations, development strategies and actors in the process are characterized. The analysis of each region ends with a presentation of post-mining potentials and their embedding in recent development strategies.

The *third part* discusses the state of the art in the use of Central European post-mining potentials in the form of a "good practice analysis". 50 projects and 23 centres of knowledge were analyzed on the basis of pre-designed and completed forms. Evaluation methods were tailor-made. The analysis establishes a distinction between the efficient, long-running projects for the use of cultural potentials (e.g. mining museums, tourist paths, mining-related events) and very recent, financially demanding, (mostly pilot) projects for using natural potentials, such as biomass production on degraded land or geothermal energy for district heating. Where locations accommodate multiple uses and projects can be considered comprehensive, an integrative approach is introduced in addition to cultural and natural potentials. An overview of centres of knowledge shows that universities and research centres have successfully adapted to the needs of post-mining regions, offering them knowledge and experience for the whole range of purposes, e.g. geotechnical solutions, land reclamation and recultivation projects, social transformation, etc.

Part four provides a scientific debate on post-mining potentials. The authors of the six contributions address the topic in specific ways, considering concrete empirical knowledge from different theoretical perspectives. Antonín Vaishar, Zdeňka Lipovská and Milada Šťastná (Brno) see small towns as functional centres in mining regions undergoing a radical change. Jörn Harfst, Peter Wirth and Gerd Lintz (Dresden) discuss the use of old mining potentials as a problem of regional capacity building. Sylwia Dołzbłasz (Wrocław) focuses on local actors in the restructuring of post-mining municipalities. The role of youth participation in the development of former mining regions is highlighted in the contribution by Naja Marot and Barbara Černič Mali (Ljubljana). The strategic destination management in an Alpine mining region is the focus adopted by Judith Pizzera and David Osebik (Graz), who explain extreme and endurance sport as an opportunity for image transformation. And the role of natural protection and ecotourism in the development of a former mining region is analysed by Gergely Horváth and Gábor Csüllög (Budapest).

In the *final part* we return to overall reflection on the prospects and possibilities of post-mining regions in Europe. The discussion draws both on empirical research in the regions and general considerations about post-mining development, offering recommendations for policy at the European, national, regional and local levels. The message is that the integration of the natural and cultural potentials of mining in the urban and regional development strategies of former mining regions can improve the outcomes of regeneration – even during outphasing. As we see, the potentials in European mining regions differ strongly depending on the type, duration, and spatial impact of mineral extraction. There is accordingly no one-fits-all solution. But certain development axes can be considered essential.

Last but not least, the editors would like to express their appreciation to Katrin Schießl, Clemens Herrmann and everyone involved at the oekom Verlag for their support in the decisive phase of this publication. We also thank Rhodes Barrett (Berlin) for proofreading all contributions with such care, keeping in mind that none of the authors is a native speaker of English.

It is the hope of the editors that this publication will encourage scientific investigation in post-mining regions, help improve the management of mining and post-mining regions in Europe, and draw political attention to the needs of areas affected by mining.

Peter Wirth, Barbara Černič Mali and Wolfgang Fischer

Part I: Overview

Utilising endogenous potentials via regional policy-led development initiatives in (post-) industrial regions of Central Europe The role of public sector in local economic and territorial development. 2019 | book-chapter. Source: Peter Wirth. Preferred source. Cultural Heritage and Wind Turbines " A Method to Reduce Conflicts in Landscape Planning and Management: Studies in the German Ore MountainsEuropean Countryside. 2018-12-01 | journal-article. DOI: 10.2478/euco-2018-0036. Preferred source. Post-Mining Regions in Central Europe. 2012 | book. ISBN: 978-3-86581-294-0. 2nd EUROPEAN MINING & EXPLORATION FORUM. Mining in Europe - moving up with the buoyant markets. 14 - 16 June 2017 | Belgrade, Serbia. Registration "»." By bringing to the region global mining expertise, the Forum aimed to help the local Government, Miners and Local Communities to take advantage of the international knowledge gained by other mining regions in developing sustainable and responsible mining industries. The Forum offered vibrant platform for dissemination of innovative technologies and promoting investment opportunities for mining and exploration across Eastern, Central and Southern Europe. Over 40 speakers and panellists presented at MINEX Europe 2017 Forum.