The Extractive Industries and Society 2 (2015) 217–224

Contents lists available at ScienceDirect

The Extractive Industries and Society

journal homepage: www.elsevier.com/locate/exis

Original Article

Utilizing the past: Valorizing post-mining potential in Central Europe

Jörn Harfst*

University Graz, Department for Geography and Regional Science, Heinrichstraße 36, 8010 Graz, Austria

ARTICLE INFO

Article history:
Received 9 October 2014
Received in revised form 5 January 2015
Available online 28 January 2015

Keywords:
Post-mining potentials
Endogenous growth
Old industrialized regions
Regional development
Central Europe

ABSTRACT

Once cradles of industrialization and centers of wealth creation, many "old industrialized" regions worldwide are currently faced with crises. Nevertheless, they are also places that have searched for innovative spaces and practices in order to overcome the economic, social and environmental outcomes of structural changes.

In recent decades, many European centers of old industries (e.g., mining and steel production) have been rendered unprofitable through various processes. These changes have had a profound impact on such regions: complete closures and substantial downsizing of production sites have triggered difficult processes of de-industrialization, unemployment and outmigration. Additionally, negative connotations and images of the industrial past and the (post-) industrial present hamper development efforts. Regions characterized by small and medium-sized towns have been negatively affected.

This paper discusses approaches and challenges to overcome the difficult transformation processes using the examples of three Central European mining regions, highlighting their ways towards more sustainable futures. The paper asks specifically about approaches that include potential related to the industrial past that can be reutilized in different ways, opening new development perspectives. The focus is on the opportunities and problems in addressing this post-industrial potential.

1. Introduction

Uneven development in late capitalist society has various spatial consequences. One of the most analyzed and researched subjects in regional sciences—but nevertheless persistent forms—has been the appearance of regions whose previous growth paths have been interrupted and that now face uncertain futures regarding their economic and social development. These "old industrialized" regions in Europe and elsewhere have long been at the forefront of crises and the search for innovative spaces and practices in order to overcome the economic, social and environmental outcomes of structural changes (Cooke, 1995; Müller et al., 2005; Koutsky et al., 2011).

In recent decades, many traditional European centers of old industries (e.g., mining and steel production) have been rendered unprofitable through various processes, such as transforming from state-led to market economies and the increasing competition on world markets. These changes have had a profound impact on many of these regions, which were once the cradle of industrialization and centers of national wealth creation. Here, the complete closure or substantial downsizing of industries has triggered difficult processes of de-industrialization, causing high unemployment and outmigration.

These processes not only affected larger European steel and mining regions such as the German Ruhr valley and the northeast of England but also had a profound impact on places outside of such agglomeration areas. In particular, regions characterized by small and medium-sized towns often have to face the full extent of the multidimensional challenges necessary to transform from industrial pasts to (post-)industrial futures. Here, a lack of economic alternatives coupled with missing organizational, financial and conceptual capacities often overtaxes local and regional decision makers (Wirth and Lintz, 2007; Harfst et al., 2012a,b; Harfst and Marot, 2013). The effects of structural change can therefore have a devastating impact on the communities affected (e.g., Neil et al., 1992; Anderson, 2014).

This paper discusses approaches and challenges to overcoming the difficult transformation processes of old industrialized regions in Central Europe using the examples of three mining regions, namely, the Austrian ore mining and steel processing region Steirische Eisenstrasse; the Slovenian mining and industrial region of Zasavje; and the German brown-coal mining region of Lusatia. This contribution will focus on examples from regions that are predominantly characterized by small and medium-sized towns

* Tel.: +43 3163805147.
E-mail address: joern.harfst@uni-graz.at

http://dx.doi.org/10.1016/j.exis.2015.01.003
2214-790X/

because here, the problems of change and the opportunities for new development are especially difficult to obtain, due to the limited capacities (know-how, administrative and financial resources) these territorial units possess (Harfst and Marot, 2013). The paper asks specifically about approaches that include potential related to the industrial past that can be reutilized in different, sometimes innovative, ways. Another focus lies in the policy responses and the impacts that utilizing post-mining potential can have in such regions.

In the following section, a short introduction is provided on the challenges mining regions in Central Europe face, along with a description of the potential from the earlier industrial production that might play a role in the transformation process. Additionally, the problems of structural change and the responding policy frameworks will be highlighted. In the third section, three examples from Central European mining regions will be used to illustrate the assumptions made in the second section. The fourth section will discuss the examples and ask what possibilities and limits the utilization of post-mining potential might offer. Finally, a conclusion is presented.

The background for this article is formed by research carried out for the ReSource (www.resource-ce.eu) and SHIFT-X projects (www.shiftx.eu), both Objective 3 'Territorial cooperation' projects (Central Europe), co-funded by the European Regional Development Fund (ERDF) from 2009 to 2014. Both projects explored the transformation of old industrial regions in Central Europe, providing unique insight into the processes of regional development across various European countries. The author was involved in both projects with the academic partner institutions.

2. Challenges and opportunities in Central European mining regions

2.1. Structural change in European mining regions

A variety of literature has addressed the outcomes of structural change in old industrialized regions around the world (e.g., Cooke, 1995; Ache, 2000; Hassink and Shin, 2005). Western Europe has seen waves of de-industrialization across various sectors, especially in the textile, shipbuilding, steel and mining industries, since the 1970s (Baeten et al., 1999; Cho and Porter, 1986; Hudson, 1998), while in Central and Eastern European countries, heavy industries shrank beginning in the 1990s after the fall of the Eastern bloc (Gorzelak, 1998; Eckart, 2003; Müller et al., 2005; Lux, 2009). Despite the processes that took place under different framework conditions, the situations in the affected regions have been quite similar: declining economic roles, unemployment, shrinking tax bases and outmigration, especially of the skilled labor force. However, not only do the economic and social futures of these places often look bleak; their processes of closure are accompanied by the discovery of risky environmental legacies at former production sites (Robb, 1994; Bridge, 2004). Additionally, mining industries often leave heavily altered landscapes, which, especially in Central and Eastern European states, often are not remediated because of funding problems or unclear ownership issues (Harfst and Wirth, 2011). Overall, the (post-) industrial futures of these places are often perceived as entailing decay, disinvestment and black and polluted industrial wastelands, from the viewpoints of the inhabitants and the outside world. These images have been identified as additional impediments to the economic development of these places (Joly, 2003; Sucháček, 2009; Benneworth et al., 2009).

Research on this topic has so far focused mainly on major cities and their restructuring efforts, such as the much-discussed examples from the northeast of the UK and the German Ruhr Valley (Hudson, 2005; Shaw, 2002). Whereas these regions' transformation efforts are well documented and have received worldwide attention and political backing, regions with predominantly small and medium-sized towns have been curiously overlooked (Vaishar et al., 2012). This marks a significant gap in the research field because smaller industrial towns are typically hit the hardest by factory closures; these areas are often mono-industrial—that is, depending on one company or sector—as well as being overwhelmed by the rapidly evolving processes of change that overtax existing small administrations (Lintz and Wirth, 2009).

Mining regions in Central Europe have a long tradition; in many places, first production existed centuries before the beginning of industrialization on the continent in the 1840s. Many mining regions, even when located outside the larger agglomerations, became densely populated places, functioning as centers of regional wealth creation and also the locations for many connected industries (steel, chemicals, etc.), creating in some places a tightly interlinked industrial agglomerate that was entwined with the mining. Additionally, especially in the former socialist countries, these towns provided important social infrastructure for the region as a whole (e.g., hospitals, cultural facilities, etc.) (Sucháček and Petersen, 2010; Vaishar et al., 2012).

Despite the already volatile character of the extraction industry in general, many Central European mining regions have been hit hard by these above-named developments (Wirth et al., 2012). Mine closures have become widespread across the continent since the 1990s, sparking scrutiny discussion on the entire composition of regional infrastructure and wealth creation in affected regions. Places with a strong sense of pride and self-awareness were plunged into crisis as the reference points of local identities crumbled away (Strangleman, 2001). The regions experienced rapid transitions from being national wealth creators to depending on subsidies and the influx of other state funds.

With these complex structures in place, simply abandoning the towns, as in other cases, is an unviable option. Therefore, regenerating former mining regions has become an important policy issue in many European countries, which have embarked on a variety of state-led regeneration efforts. Whereas the 1980s and 1990s still saw rather large funding programs for affected regions—whether from the European Union (e.g., the RESIDER and RECHAR programs) or from other nation states (i.e., the Polish Mining Act 1993 and the Mining Closure Act of Slovenia in 1995)—the focus since the beginning of the 2000s has shifted away from exclusive support of these regions. Today, rather small-scale measures distributed on a competitive basis via the European Regional Development Fund (ERDF) or rural development funds (LEADER) are the main instruments that provide financial support for the affected regions. In this context, these regions rely increasingly on their own capacities and potential to master structural adjustment, something that is especially scarce in regions outside of any agglomerations (Harfst and Wirth, 2011; Marot and Harfst, 2012) (Table 1).

2.2. Defining post-mining potential

One method of addressing the structural changes in the affected regions has been an "erase-all-traces" approach that would eliminate all reminiscences of the industrial history in question, fostering a process of collective "forgetting" about the industrial past in some places (Jonsen-Verbeke, 1999). Alternatively, affected regions have sought to actively utilize their industrial pasts as stepping stones into the future. Some of these examples have been well-documented in recent literature, which has explored different potential scenarios and utilization (see e.g., Kilper and Wood, 1995; Kirkwood, 2001; Pearman, 2009; IBA-Fürst-Pückler-Land, 2010; Harfst et al., 2012a,b; Lenartowicz and Ostrega, 2012). These