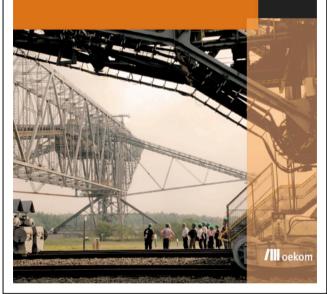


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Post-Mining Regions in Central Europe

Problems, Potentials, Possibilities



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Mansfeld-Südharz (Germany) – From Industrial Heartland to Depleted Hinterland?

Mansfeld-Südharz: A Shrinking Former Industrial Heartland

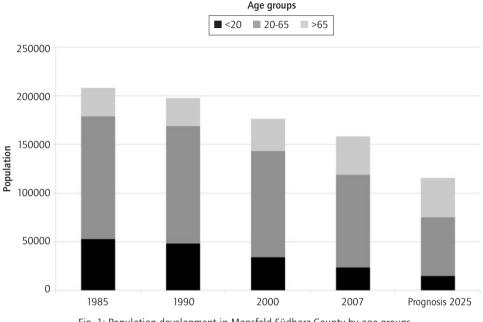
The administrative district (Landkreis) "Mansfeld-Südharz" lies on the western border of Saxony-Anhalt, a state in the Federal Republic of Germany. Geographically, the area is a transitional landscape between the western mountain ranges of the "Harz" and the "Kyffhäuser" and the lowlands of the "Magdeburger Börde" and the "Leipziger Tieflandsbucht" in the East. The region is well-known for copper mining, which ended after centuries in 1990. At the peak of production in the 1960s it employed around 40,000 people in the area. The area is also renowned as the birthplace of Protestant Reformation leader Martin Luther (1483 – 1546), whose family had been closely associated with the local mining industry, and who also died there in the region.

Although the district lies at the geographical heart of Germany, its location is distinctly peripheral, being outside the Halle-Leipzig agglomeration and separated from western Germany by mountain ranges. Nevertheless the region is an important transit corridor with motorway links to Halle-Leipzig, Göttingen (BAB 38), and Erfurt (BAB 71). It is also an important East-West (Kassel to Halle) and North-South (Erfurt to Magdeburg) regional railway corridor.

Demographic facts

In 2009 the district contained 84 municipalities with a total population of 158,232, covering 1450 km². The most important towns are Sangerhausen (pop. 31,153), Lutherstadt Eisleben (25,500), Hettstedt (15,021) and Mansfeld (10,361). The biggest towns provide only regional and local facilities. With the redrawing of regional district boundaries in 2007, the new capital of Mansfeld-Südharz became Sangerhausen rather than the traditional historical centre, Lutherstadt Eisleben.

Population density in Mansfeld-Südharz, at 109 inhabitants per km², is below the national and state average (Germany: 230 km², Saxony-Anhalt: 116km²). The population has been declining since the 1970s. This trend accelerated substantially from 1990 onwards. Between 1990 to 2007 the population decreased by 20% (see Fig. 1). For 2025, the 2007 figure is expected to fall by a further 27%. By that date, 35% of the population will have reached



the retirement age of 65. The area is therefore at the forefront of demographic change, which many communities in Germany will be facing in the coming decades.



Economic structures

The district is economically heterogeneous. Today the biggest employers are companies associated with former mining industries (MKM Copper rolling mill in Hettstedt¹, ROMANTA lignite mining²), but there are also some traditional manufacturing industries (MIFA³), as well as new branch industries (Klemme AG⁴). Since the end of mining in 1990 employment rates per sector have changed dramatically. Whereas in 1991 45% of the workforce was employed in the industrial sector, the figure in 2007 was no more than 25%, now reflecting average rates for the state and the country as a whole⁵ (see Fig. 2). Unemployment has remained comparatively high in the region ever since reunification and the end of mining, both in comparison to

¹ Leading producer of copper-based semi-finished products. Located in Hettstedt since 1907.

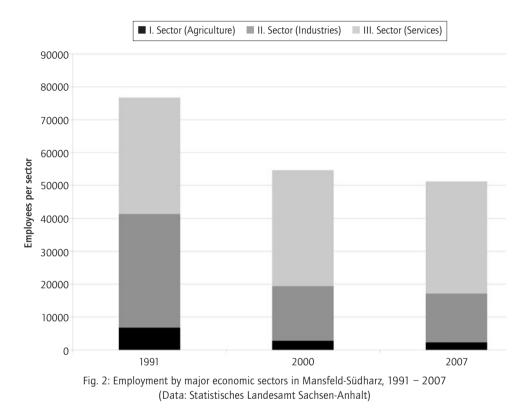
² Lignite mining company producing montanwax. Since 1922 in Amsdorf. About 480 Employees.

³ Bicycle manufacturer in Sangerhausen since 1907. About 400 Employees.

⁴ Producer of frozen bakery products. Located in Eisleben. About 900 Employees (all company data in footnotes 1 – 4: www.mansfeld-südharz.de).

⁵ Data: Landkreis Mansfeld-Südharz, Statistisches Bundesamt

federal and national figures (Mansfeld-Südharz: 19.0%, Saxony-Anhalt: 14.6%, Germany: 8.1%⁶). Despite the rich local cultural, natural and industrial heritage (Luther, viticulture, Süßer See lake district, mining history), the tourism sector has not been strongly developed. In this sector the region lacks a strong corporate image and the necessary touristic infrastructures.



Mining Industries and the Mining Heritage

The name Mansfeld is associated with a more than 1000 year-old mining tradition. Coppershale mining in this area was one of the oldest and for a time most important mining industries in the world (Jankowski 1995, 280). The most important material extracted in the Mansfeld-Sangerhausen district was copper, mined from 1200 to 1990, during which period

⁶ Data: Bundesagentur für Arbeit 1/2008

a total of 2,600,000 tons of sheer copper was extracted⁷. In addition to copper, the region of Mansfeld and Sangerhausen is also known for other ores, lignite open-cast mining and underground potash mining (Neuß & Zühlke 1982). With regime change in 1990, mining in the region came to an end because it was no longer profitable. With rising production costs and decreasing copper content, all ore extraction ceased. Lignite mining alone continues in coal fields in the southern part of the district.

Mining has produced some environmental problems in the district, mainly caused by smelting procedures. Some areas have been contaminated by heavy metals, and water and airborne toxic waste was the main environmental hazard in the region in the 1990s. In response to this problem, parts of the contaminated areas were included in the German federal programme "Ökologische Großprojekte" (Major Ecological Projects)⁸. The project "Mansfelder Land" was established in 1993, with rehabilitation measures scheduled from 1999 to 2009⁹. Another important and particularly conspicuous legacy are the numerous mine dumps in the region. More than 50 million m³ of excavated material had to be removed due to copper mining alone. While some dumps now provide material for road construction, huge areas of unsecured dumps remain, often without vegetation (see Fig. 3). Characteristic for the whole region are the huge "Spitzkegelhalden" (cone dumps), which are impressive landmarks in the region.



Fig. 3: Landscape with cone dump at the Thomas-Müntzer-Schacht in Sangerhausen/district Mansfeld-Südharz (Photo: IOER/Bieberstein)

⁷ There was also a considerable exploitation of silver with about 14.200 tons during the same period of time. Moreover, numerous metals included in copper-shale, e.g. lead, zinc, molybden, nickel, gold were mined. The "polymetalic character" of the copper-shale made the Mansfeld-Sangerhausen mining district one of the resource-richest regions in Central Europe (Jankowski 1995)

⁸ This programme was designed after German unification to tackle major environmental damages in the New German states.

⁹ The project required total funding of about € 32 million. 75% of was supplied by the federal government and 25% by the state of Saxony-Anhalt.

Steering Structural Change – Governance Structures and Regional Development Strategies

Since the 1990s regional development in Mansfeld-Südharz has been framed by structural weaknesses after the end of the mono-industrial mining complex on which the region had depended for centuries. With few industrial branches surviving, the end of mining, and regional location factors unfavourable to the introduction of new (service-related) industries, the region has to cope with high unemployment and outmigration, especially by skilled, young people. The trend was exacerbated by closure of the "Ingenieurschule Eisleben" (Eisleben School of Engineering) in 1994, which was a major institutional set-back for the whole region, leaving it without any institution of higher education. With the absence of a major scientific facility in the district, regional actors have difficulties establishing useful networks for exploiting the post-mining heritage and initiating new economic activities. These difficult framework conditions continue to hamper regional development.

The organisational capacities of the region have also in some ways proved inadequate to deal with the economic and social changes that have taken place since 1990. Over the past 20 years, the entire region has seen many administrative changes, with district and municipal boundaries shifting considerably. The Mansfeld-Südharz district in its current form has existed only since 2007. These processes have led to the merger of several historical and administrative regions with differing identities. This transformation has also been overshadowed by rivalry between the bigger towns, especially for the seat of district government. This situation has produced persistent administrative instability at both the local and regional levels. While the greater part of the district has a common history with regard to mining, in other matters it remains distinctly fragmented. Overall, these factors have reduced the planning potential and steering capacity of district government, resulting in a lack of common visions and strong leadership. One example of this problem is the formal networking between local authorities, especially in the form of the existing, municipality-based tourism associations. These parallel structures are marked by conflicting local interests that block the establishment of a joint regional marketing association that could develop a stronger marketing strategy for the region as a whole. Joint projects such as a region-wide "Kultur-, Tourismus- und Wirtschaftsförderungs-GmbH" (tourism and business development agency) have not yet been implemented even after years of discussion among regional stakeholders (Harfst et al. 2009; see also¹⁰).

As far as formal planning structures are concerned, the Mansfeld-Südharz district belongs to two planning regions, "Halle" and "Harz." Each has its own regional development plan. Since the district is at the periphery of these two planning regions and there is no overall

¹⁰ Mitteldeutsche Zeitung 5.3.2010 "Kultur und Wirtschaft getrennt gefördert" (retrieved via www.mz-org.de; 26.6.2010)

strategic concept covering the whole, the district's formal strategic planning capacity can be described as low. The only general planning instrument for the whole district is the 2006 "Integriertes ländliches Entwicklungskonzept" (ILEK, Integrated Rural Development Concept), which, however, excludes the region's core urban municipalities.

Despite fragmented power structures, the region has in the past shown strong potential for informal, project-based networking addressing particular issues and drawing on existing informal networks. The region has therefore been relatively successful in obtaining state funding for various projects.¹¹ The major coherent structure for cooperation in the district is the LEADER Action Group (LAG) ("Aktionsgruppe Mansfeld-Südharz"), which handles funding provided under the European Union's LEADER programme for rural areas. The programme has been financing projects in the region since 2003. The LEADER group Mansfeld-Südharz and its predecessors have realised 37 projects since that date at a total amount of about \notin 6.5 million. The main focus of the LAG is small and medium-sized enterprises and the touristic infrastructure. The group is an important interface for different ideas and actors in the district, especially because of its capacity to turn ideas into projects. Leading actors in the LAG are also associated with another important regional network – the management of the former mining company. This network includes actors such as official miner's associations, an important group concerned with the preservation of the mining heritage, as well as organisations such as the "Bildungswerk der Unternehmerverbände Sachsen-Anhalt" (BdU, Training Centre of Industry and Commerce in Saxony-Anhalt), which plays an important organisational role in applying for and running EU projects in the Mansfeld-Südharz region. Regional actors have recognised the connection between LEADER funding and other EU activities as a major regional development instrument. While participation in EU projects such as ReSource allows regional actors to develop innovative concepts, LEADER funding enables such ideas to be implemented. In general, reliance on LEADER underlines the project-based approach of the region's development efforts and has been the most important practical development tool in the region in recent years (Harfst et al. 2012). A thematic focus of the LAG has been the active promotion of tourism and post-mining potentials in the region, to be discussed in detail below.

Post-Mining Potentials as a Future Development Path?

Despite the region's heritage from mining and associated heavy industries, the Mansfeld-Südharz region is a rather attractive tourist destination, combining various landscapes forms with (low-key) cultural facilities. Of special importance for the Mansfeld-Südharz district is the

¹¹ i.e. the MAGWELD project funded by the Federal Ministry of the Economy (BMWi) (www.magweld.de) or the "Demographic Change" project by the Federal Ministry for Urban and Regional Development (BMVBS) (www.region-schafft-zukunft.de)

legacy of Martin Luther, the Protestant Reformation leader, who was born and died in the town of Eisleben. The region's historical links with this historical figure can be described as the key touristic potential. It is accordingly exploited as the most important "brand" in touristic marketing for the Mansfeld area. The region's mining traditions are reflected in this overall strategy, especially because of Luther's own connections with the industry, his father having been a miner. The area is also known for fruit-growing and viticulture and also offers a wide range of leisure and recreation amenities (for example the lake area "Süßer See"). There are also cultural facilities of local, regional and even national importance (Lutherstadt Eisleben, Monastery of Helfta, Rosarium Sangerhausen, Industrial Tourism Destinations, Straße der Romantik¹²). Legacies of mining also mark the landscape (cone dumps as landmarks of the region) and some projects have preserved and developed the mining heritage for tourism.

The European Union's LEADER programme has enabled the region to fund projects concerned with mining, with the aim of developing the heritage into a touristic asset for the region by exploiting many of its cultural potentials. One such project has directly to do with mining legacies, namely the "Kupferspuren" project ("copper traces"). The project unites the cultural potentials of the mining heritage into a resource for regional tourism. The project was funded by the LEADER+ programme between 2005 and 2007. The idea was to collect and arrange mining-related information. An internet database was established to provide an information platform for planned touristic projects in the region.¹³ Another project combining mining traditions and tourism in Mansfeld-Südharz is the so called "Glück-Auf-Tour."¹⁴ It is embedded in the regional tourist project is managed by the "Tourism Association Wittenberg", the "Glück-Auf Tour" itself was established by the miners' association "Interessenverein Bergbau" in 1994. Important heritage and tourism sites advertised under this label are:

- ___Mansfeld Museum in Hettstedt, a technical museum and research institution on the history of Mansfeld copper mining (incl. replica of the first German Watt's steam engine)
- —Mining railway between Klostermansfeld and Hettstedt, the oldest operating narrow gauge railway in Germany. Features original steam and diesel locomotives for touristic purposes running between the former mining sites in the region
- ____Röhrig-Schacht near Sangerhausen. Mining museum and show mine established in 1991. Visitors can take guided tours in the 300m deep shafts of the former copper shale mine
- ___Bergschulmuseum Eisleben, displays materials from the former mining school in Eisleben that was established in 1798
- ____Thematic hiking trails around former mining sites i.e. near Sangerhausen and Eisleben (Harfst et al. 2009).

¹² www.kloster-helfta.de; www.industrietourismus.de; www.europa-rosarium.de

¹³ www.kupferspuren.artwork-agentur.de

^{14 &}quot;Glück Auf" = the common German miner's greeting, www.glueck-auf-tour.de/

Limits of Post-Mining Potentials in Structural Change

As shown, regional stakeholders have made great efforts to integrate post-mining potentials in the field of tourism. The aim has been to add to the touristic potential of the region and to preserve the regions mining heritage and identity. In addition to these touristic potentials, natural post-mining potentials are used in the generation of geothermal energy from mine water at the mining museum in Wettelrode (Fig. 4). The idea stems directly from experience gathered in the ReSource project. Other ways of utilising natural potentials have not been put forward to date.¹⁵



Fig. 4: Mine water as a geothermal potential – inside the "Froschmulden" drainage tunnel/district Mansfeld-Südharz (Photo: BdU)

Regional stakeholders have identified the region's potential on the domestic tourism market as one of the future development paths for the area. The strong "branding" potential ("Luther"), provides important access to a market dominated by strong trade names. Against this background, the mining heritage is seen as an important additional feature, providing a way to combine local identities with the development of tourism. Nevertheless, exploiting these cultural and touristic assets has so far proved difficult, and the full potential of the options has not been realised. The heritage of the Reformation leader is currently more closely associated with places like Wittenberg or Eisenach, both very successful in marketing their Luther heritage. The proximity of the well-established Harz mountain tourist destination also hampers development efforts, especially as establishing a joint and comprehensive touristic marketing concept for the Mansfeld-Südharz region has proved difficult. A major stumbling block has been strong local and regional antagonisms. The region's touristic marketing

¹⁵ One reason for this missing initiative might be the lack of orderly rehabilitated former mining site (heaps, dumps), which prohibits the use of such places for i.e. biomass production.

concept is accordingly based on the efforts of only single municipalities. This absence of coherent cooperation is a major obstacle, as the region has not managed to develop the tourist infrastructures needed to fully exploit its assets. The transition from an industrial to a service-based economy is proving a major challenge for all of the region's stakeholders and actors (Harfst et al. 2010).

Conclusion

The region of Mansfeld-Südharz contained one of the biggest deposits of copper shale in Central Europe and was therefore long an important mining district at the heart of Germany. The closure of the mines in 1990 has left the region struggling to cope with the outcome of this structural change.

In many senses at the periphery of economic development and without the infrastructure necessary to boost economic development, Mansfeld-Südharz has faced the usual problems of a post-mining region under particularly aggravated conditions. Low potential for endogenous growth, constantly high unemployment and very problematic demographic development have produced a difficult overall scenario for the future of the region. In the face of the reorganisation of administrative units and regional antagonisms, the region has been decisively hampered in developing a coherent strategic agenda for development even 20 years after mining ceased. With the exception of the focused rehabilitation programme "Major Ecological Projects," the region also lacks broader national support in coping with its post-mining legacy, and the formal regional planning capacity remains weak. This situation leaves regional and local actors in charge of reviving the region who are still struggling to find common ground for a joint development strategy. While many stakeholders in the region have recognised these problems, adequate measures to tackle them have not been forthcoming. Regional development thus relies mainly on projects funded by LEADER or national government. Some of these projects have identified and exploited cultural potentials from the mining heritage to improve tourism and preserve local pride and traditions. These project-based approaches have proved successful and have established links between regional actors. Such networks offer major potential for creating a stable, joint development strategy for the region's future and overcoming regional differences between actors. From this point of view, the existence of such informal networking structures is crucial: they have enabled important development projects to be realised in the district. This marks a definite step forward in regional development.

On the other hand, joint strategies are urgently needed to meet the challenges the region and its stakeholders will have to face in the future. Although some of the region's location factors are favourable and have recently improved (especially transport connections and a diverse regional economic structure), the general framework conditions under which regional development has to be realised are unfavourable: high unemployment, negative

demographic developments, and absence of institutions to facilitate endogenous growth (i.e. universities, research institutions) are issues that inhibit regional development. Demographic trends in Eastern Germany are towards re-urbanisation, which will strengthen/stabilize existing centres, while the periphery is set to lose population and related infrastructures. Regions such as Mansfeld-Südharz will come under additional pressure from these processes, which are likely to accentuate existing demographic difficulties. There is also a general trend away from active redistribution policies aimed at weaker regions such as Mansfeld-Südharz in Germany and in Europe as a whole. For such regions this could mean a further downturn in local economic activities and accelerated outmigration, which would severely hamper all regional efforts to invest in and exploit mining potentials and overall development options. The need to position a region in the national/global market through, for example, regional marketing, will become more important. This requires a shared vision and strategic concept within the region. If such a strategy is not developed and supported by regional actors, the region might lose further ground in economic attractiveness and investment opportunities. Continuing financial straits and demographic change mean that the region's problems are likely to remain severe.

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