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The case of Sardinia

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Introduction

This chapter will analyze the evolution of mining heritage management and promotion in Sardinia. The core theme will be the analysis of the changing perception of mines as an economic and development opportunity occurring in the shift from the productive phase to the transformation of mines into tourism attractions. In this analysis we will focus on the Geopark creation process and the inclusion in the related UNESCO list. The analysis will also be based on the interviews held with local decision makers, social and economic actors. Particular attention will be paid to identity issues in the background of the local development process.

Tourism products based on mining and geological attractions are nowadays commonly marketed. What is relatively new is the attempt to provide international coordination to the national initiatives. UNESCO took the lead in this process in June 2001, when the Executive Board mandated the development of a network aiming to support territories and tourism destinations interested in integrating Earth heritage into traditional tourism supply. The theoretical and operative framework adopted by UNESCO is the idea of the Geopark (Dowling and Newsome, 2006). It’s by means of the Global Network of National Geoparks that UNESCO tries to promote and coordinate geological heritage preservation (UNESCO, 2008). The network strategies are integrated with other UNESCO centres of activities like the World Heritage Centre, the Man and the Biosphere Programme (MAB) and the World Network of Biosphere Reserves.

The basic assumption of the Geopark model is the need to integrate geological, historical and cultural heritage with environmental resources in a development process based on local communities and their economic activities (UNESCO, 2008). According to this approach geological heritage valorization finds its sense in relation to territories as the context of material, social and symbolic practices. Economic development strategies related to geological resources valorization are linked to an extensive notion of territorial culture and heritage. Interesting experiences of innovation in design, production and commercialization of traditional products emerge in Geoparks best practices as a result of innovating manufacturing and food sectors (Ruiz-Ballesteros and Hernández-Ramirez, 2007; see www.europeangeoparks.org for an overview of European best practices). Local communities are involved in an evolutionary process of transformation and adaptation of values, knowledges and practices. On the one hand this process recognizes economic significance of artefacts or traditional practices in crisis or perceived as marginal with respect to mass consumption markets. On the other, local knowledge can find new value in its originating milieu. Communities can preserve their
particular heritage knowledge by managing the innovation processes and directly exploiting the benefits of such processes. As a consequence innovation processes can contribute to avoiding the risk of local knowledge trivialization by means of a continuous adaptation mechanism activated by local communities. Territories in the Geopark vision are the support for local based development process, shaped around community priorities and embodied in the lives of local people.

Reflections on the relationships between communities, territories and the tourism cross development debate have particularly involved geographers in the last decades (Soja, 1971; Raffestin, 1981; Turco, 1988; Hall, 1994; Hall and Richards, 2000; Ruiz-Ballesteros and Hernández-Ramírez, 2007). The way the milieu (the simple space where communities imagine, project and perform their ideas on a piece of land) is related to territories (the result of communities’ spatially determined vision and projects) is clearly developed in Raffestin (1981). Space is conceived as a precondition of territories that are produced by the actors and, consequently, territories are by definition contested spaces, it being nearly impossible for all the actors to share the same imagination, vision and projects for that space. The concept of territorialization expresses the process of territories production. Tourism development projects can be interpreted in this way as territorialization elements, for the fact that they involve an idea, a vision of the projected space and of the actor’s role in such a development project. The expected result is a process of definition of a space as a tourism territory.

Methodological notes

The chapter describes the results of the research activities carried on during the last two years by the authors on the Geopark experience in Sardinia. Particular attention is devoted to investigating the evolutionary process of the Geopark that in organized forms is now more than ten years old. To have a picture of the state of the art of the Geopark an analysis of the social, economic and governance patterns has been carried out with the regional and local actors directly or indirectly involved in the development process of the Geopark in Sardinia.

At the end of the 1990s extensive research focusing on 113 direct interviews with miners showed their perception of the transition phase (Boggio et al., 2003). During the last two years a direct survey of 25 relevant actors (institutional representatives, enterprise managers, social and cultural associations) has been carried on during the Socio Economic Analysis of the Geopark (CRENoS, 2008). Semi-structured interviews have been realized with the aim of evaluating both the perception of the actors directly involved in the development processes but also to investigate how the Geopark communities are aware of the valorization processes in action.

At the same time desk analysis of the socio-economic data has been supporting the research design and analysis (CRENoS, 2008). The result is a view focusing mainly on territories, their actors and the dynamics related to mining activities heritage, viewed under the lens of tourism development analysis.

Mining territories in Sardinia

Historically, mining activities have been present in Sardinian territories. Traces of mineral extraction date back to the origins of the Nuragic civilization around 2000 years before Christ. Large scale territorial specialization in mining activities is not observable until the emergence of the modern age of the mine industry under the Savoy Kingdom during the eighteenth century. From the second half of the nineteen century the mining activities in Sardinia attracted
the interest of North European capitalism. This was probably the beginning of the formation of a large scale mining industry and of a consistent specialized working class. From the 42,000 tons of minerals produced per year in the decade 1860–70, Sardinian production grew to 164,000 tons per year between 1890 and 1899. At the end of the nineteenth century around 11,200 people were employed in the mines and at least one-tenth of Sardinia’s population depended on the industry. Mining integrated farming activity revenues defined a new productive specialization but also marked the emergence of mining territories as they appear today.

Analysts agree on the strong colonial character of the Sardinian mining industry at this stage (Ortu, 1998). On the one hand the internal market was not able to sustain the birth of a modern extractive industry given the low population density and the subsistence character of the rural economy. On the other hand foreign capital controls nearly all of the mining sector and the raw minerals are destined for the European markets. Both the work organization model and the broad paternalism of the mines entrepreneurship produced enclavist economies with reduced multiplier effects on the regional scale. But during its development history, mining has represented at the same time an impressive modernization opportunity for Sardinia, for instance supporting workforce mobility flows at the transnational scale. In 1862, one-third of the Sardinian workforce in the mining sector (around 3,100 workers) was composed of people from abroad. At the end of the same decade three quarters of the 9000 people workforce of the regional mining sector was from Sardinia. In a few years, mining contributed to knowledge exchange, innovation in lifestyle and in the self representation of rural Sardinian people (Ruiu, 2008; Salvadori, 1990).

Notwithstanding working under inexcusable conditions and marked inequalities in the local distribution of wealth, miners perceived their work as an improvement in life conditions. On the local scale mining has resulted in the consolidation of a specialized expertise and a revolutionary shift from farmhand working conditions to the mines salary. Territories started to experience internal mobility in search of better working opportunities and the highest level of salary. Moreover, for Sardinian workers the transition phase from the traditional rural economy to the mining sector appears more radically oriented than in other mining territories. Mining and farming multi-activities that are commonly present, for instance, in Spanish and Belgian history are uncommon in Sardinia. Return to the land is usually related to lack of employment during the recurrent falls in mineral price levels on the international markets. Miners act like a specialized work force with high levels of membership of mine workers’ unions especially in the coal productions areas. Social protest even under the most anti-democratic political phases and under the Fascist Regime (1922–1943) has become part of the cultural background of miners and their families, and also of the territories involved. The identity of territories and communities is strongly dependent on the solidarity networks developed in the mining environment.

Mining industry priorities determined on the one hand a slow adaptation of territories to the reorganization of space and of the communities around the new production system. However, in some cases they produced impressively drastic territorialization and reterritorialization processes. This was the case in Sulcis and the coal district of Carbonia, an urban settlement that starting from the name (in English something like coaltown) embodied a new territorial identity based on coal production. In 1935, the Fascist Regime created a government controlled authority to manage coal production at the national scale and focused on Sulcis as one of the most relevant production areas in Italy. Industrial extraction on a large scale started in 1937 and the regime planned a new urban settlement to house the workers. In a territory characterized by dispersed settlement supporting the traditional farming economy a new 12,000 inhabitant city was built in less than 300 days. Carbonia was planned as a dispersed settlement
in effect interfering with any form of social integration and spontaneous aggregation between the workers. More than 90 per cent of the residents were male. Spatial organization reflected the image and the sense the Fascist Regime envisioned for the newly born coal mining territory. A few years after the end of the Regime, Carbonia reinvented its identity, becoming the core area of miners’ fights and workers’ social claims, led by the Communist Party.

Mining activities marked in different ways territories with metallurgical mining industry specialization and coal mining areas. The traditional metallurgic areas were mainly characterized by private entrepreneurs, supporting paternalistic social policies and the professionalization of a specialized working class. At the end of the productive phase municipalities in some way tried to assist private entrepreneurs to provide alternative development options and to offer services formerly provided by mining companies. On the other hand, the coal industry was born as a public project around a factory city owned by the public company managing industrial sites. The state has been the miner’s traditional counterpart both in its Fascist Regime form and, as a democracy, after the Second World War. The proletarization of a huge workforce with reduced technical skills characterized coal mines and created a strong solidarity network related to unions and the Communist Party, the base of successful social claims against the state.

During the transition from the productive phase to the contemporary attempts of heritage valorization mining territories have been experiencing a loss of identity. During the 1960s petrochemical and metal industry development, far from involving local communities in the elaboration of a shared development project, only partially absorbed the mining workforce. In 1957, the mining sector recruited the last miners and during the 1960s private entrepreneurs rapidly abandoned the mining sector that survived only through public intervention. For a decade, coal mines were supported by a public company aiming to produce energy from coal but in 1974 the majority of these mines closed. Mining territories had finished their productive phase and needed to reinvent themselves.

Previous research described the miners’ perception of the transition phase between the last productive phase and the introduction of the Geopark idea (Boggio et al., 2003). In this research, 90 interviews were carried out with miners receiving vocational retraining for environmental recovery projects. They clearly perceived the difficulties of a valorization project founded in territories marked by low entrepreneurship and a tradition of external (private or public) funding of economic activities. The feeling that the mining social tissue had nearly disappeared emerged clearly from the interviews together with a certain lack of confidence in the territories’ capacity for self-organization. It was like people still living in former mining territories were there only because “...they have not be able to escape before the fall down!”, as one miner said during the interviews. On the other hand possibilities offered by the changed development paradigms emerged. What was useless for the extractive industry and was left untouched, now could be the core asset of a tourism development looking for a high level of nature, silence and unique landscapes. Together with the awareness of the exceptional territorial resources emerged the issue of a territory without entrepreneurial capability and private financial resources to support a local tourism industry.

The Geopark: imagined tourism territories

In October 1997, the Geomining Historic and Environmental Park of Sardinia as declared by UNESCO as the first park of what would become the World Geopark Network. The Italian Ministry of the Environment formally constituted the park in 2001 and it is now organized as a consortium of public authorities at the national, regional and local levels. The Geopark project
at the moment involves 8 areas and 87 municipalities of the 377 in Sardinia. The population involved represents around 35 per cent of the total inhabitants of the region. It is one of the biggest and most differentiated parks in Italy, extending for around 3,800 km²: approximately 15 per cent of the territory of Sardinia.

The territories involved show a strong element of heterogeneity linked by the common mining heritage and the need to define new development strategies. In the definition of mining heritage, territorialization processes identify their own limits and borders more in terms of the congruity of a space image and perception rather than on other material elements related to historical dynamics. Municipalities aiming to be involved in the Geopark project in some cases can claim very poor surviving elements of mining heritage but are strongly attracted by the growth opportunities related to Geoparks. Mining heritage is thus chosen and exploited as an economic factor, supporting a new development phase.

At the same time nearly all the traditional mining territories in Sardinia share some critical issues related to their socio-economic structure. Population growth rates are nearly stagnant or negative in the majority of Geopark areas outside of urban settlements. Residents are ageing and the percentage of active people is consequently reduced. Tourism supply is concentrated on the coastline with a strong presence of holiday houses and a high seasonality. The integration process between the traditional summer tourism supply and the inland area is reduced, and at most of the sites, being a distance of more than 40 km from the coastline makes it very difficult today to find a hotel to accommodate a bus tour with 50 people. In Geopark territories, the main issue is not to differentiate the tourism supply but to create or consolidate a tourism market.

The analysis of the Geopark potential tourism supply reveals the existence of an enormous number of sites (383) perceived as relevant local heritage resources both by local communities and decision makers. The majority of the attractions surveyed by the study can be defined as mining heritage sites.

Interestingly, expert perceptions of what can be attractive for a tourist largely differ from what communities perceive as representative of their heritage. Only 20 per cent of the sites selected by local communities present significant elements of interest to a potential tourism market in terms of accessibility, state of conservation and historic value. The selection process will represent a major issue for Geopark managers in the resources allocation processes.

**Table 17.1 Conservation conditions of the main heritage sites of the Geopark (2008)**

<table>
<thead>
<tr>
<th>Area</th>
<th>Abandoned</th>
<th>Open to public</th>
<th>Partially restored</th>
<th>Completely restored</th>
<th>Industrial activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentiera-Gallura</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Funtana Raminosa</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Orani-Guzzurra-Sos Enattos</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sarrabus-Gerrei</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Monte Arci</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Iglesiente</td>
<td>20</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Sulcis</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Guspinese-Arburese</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>21</td>
<td>9</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Direct investigation (CRENoS, 2008).
The territorialization process addressed by planning for heritage tourism inevitably produces a hierarchy between competing resources, sites and territories.

At the moment only 21 sites are open to the public in the Geopark territory. The analysis of sites clearly shows the difficulties in rationalizing tourism site management and promotion activities. The research firstly evaluated the level of efficiency in the management of each site. A relevant element here is the management model. The sites are administered in some cases by the public company IGAE, in some others by associations or private companies and municipalities. Only one site is directly managed by the Geopark. The variety of solutions adopted represent in some ways a limitation on the coordination attempts of the Geopark.

Visitors are relatively few. The total number of visitors for all the sites combined can be estimated at around 60,000 people per year. The most successful site, Porto Flavia, hosts around 17,000 visitors each year. Especially in the less relevant sites almost no marketing activities are supported due to budget limitations. Geopark site managers have only a vague perception of visitor characteristics. Little information is collected about tourist motivations and customer satisfaction levels. Some interesting elements resulted from research adopting Contingent Valuation Analysis techniques to evaluate the characteristics of possible mining heritage tourists and their visit experience (Balia et al., 2003). The sample was composed of more than 400 interviews with cultural tourists in South Sardinia. Some questions tried to verify tourists’ willingness to visit Porto Flavia, the most popular site of the Geopark. With respect to visitors’ motivations, mining history and, more generally, mining environment experience were indicated as the most relevant. A quarter of the sample declared that participating in mining tourism would be an opportunity to escape the traditional coastal holiday in Sardinia. On the other hand tourists not interested in mine visits acknowledged their indifference as being mainly due to the difficult access to sites, the distance from the seaside and other motivations related to the organization of a visit. In the attempt to investigate the willingness to pay for a visit the research showed that cultural tourists interested in mining heritage declared themselves to be ready to pay from 50 per cent to 100 per cent more than the real price (€ 8) to visit Porto Flavia. Tourists clearly prioritized also a hierarchy in the services they expected to find during a visit experience. More than the half expected to find a guided tour of the galleries and, respectively, the opportunity to go trekking and the presence of minerals expositions at the sites.

Together with documenting the number of visitors, an analysis of revenues and costs has been carried on in the Geopark sites (CRENoS, 2008).

At the moment profits from attractions like mining gallery visits or museum entrance fees are the main source of income while other possible revenues from bookshops, rental for events, conferences, incentives and also catering services are largely underdeveloped. The total number of ticket sales in the Geopark sites is around ten times higher than the revenues from other activities. These data clearly show that in terms of tourism product creation and marketing, the Geoparks sites have a lot to learn from related European experiences in Spain, Belgium or the UK (Hose, 2007; Cole, 2004). The economic analysis of the sites shows that costs for raw materials and equipment are the highest expenditures together with personnel costs.

<table>
<thead>
<tr>
<th>Costs</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees: € 459,148</td>
<td>Tickets: € 305,362</td>
</tr>
<tr>
<td>Other costs: € 669,764</td>
<td>Other revenues: € 35,300</td>
</tr>
<tr>
<td>Total: € 1,128,884</td>
<td>Total: € 340,500</td>
</tr>
<tr>
<td>-€ 788,384</td>
<td>Total: -€ 788,384</td>
</tr>
</tbody>
</table>

Source: Direct investigation (CRENoS, 2008).
Territories development and the environmental challenges

Mining territories in Sardinia show some relevant environmental issues correlated to their industrial past that strongly limit tourism development projects. Industrial pollution and wastes are concentrated around the main extractive sites but also contaminate territories on a larger scale. In 2003, the regional authority evaluated 18.5 km² of lands occupied by different sorts of industrial wastes and dumps related to mining activities (Autonomous Region of Sardinia, 2003). All those areas are located in the Geopark territory. Sulcis, Iglesiente and Guspinese territories, where mining activities have been highly developed in the last two centuries, suffer from different forms of pollution. Aerial diffusion of minerals like lead, zinc, cadmium, and arsenic has been confirmed by the regional authority investigations. In the same areas groundwater and wells show high concentrations of lead and zinc even some kilometers distant from the pollution sources and acid mine drainage water due to sulphides is also present (Cidu et al., 2007; Istituto Superiore di Sanità, 2004). During the last 10 years IGEA has been developing monitoring activities to define the level of pollution originated by mining activities on around 80 sites in the Geopark area. At present in only a few cases have recovery operations started. During the last 10 years resources have been concentrated in the Sulcis, Iglesiente and Guspinese territories that received, between 1996 and 2003, nearly all of the 47 million Euros available for environmental recovery of mines. In 1990, the Italian Government classified the Sulcis area as a territory with a high risk of environmental crisis and developed a Recovery Plan (Autonomous Region of Sardinia, 1994). Sulcis is also affected by the pollutants from industrial area of Portovesme: gas emissions, aerial powders, waste waters and industrial dumps. From 1995 to 2005 around 70 million Euros have been devoted to 60 depollution projects, more than half related to the industrial area activities. In 2005, the Sardinia Health Department published research also involving the Sulcis, Iglesiente and Guspinese territories, investigating the health conditions of residents in areas with a relevant presence of industrial, military or mining activities. The research considered epidemiological data between 1981 and 2001 and tried to delineate possible scenarios based on the data analysis. Concerning the Geopark area Sulcis municipalities showed illness trends higher than regional averages in relation to the proximity with Portovesme industrial sites. Respiratory diseases generally had a rate between 30–65 per cent higher for men and between 18–23 per cent higher for women than the regional average. Lung cancers had a rate between 26–62 per cent higher for men and between 16–34 per cent higher for women than the regional average, depending on municipalities. The other traditional mining areas of Iglesiente and Guspinese showed similar trends even though they were not affected by the same industrial development as Sulcis. Lung diseases were 149 per cent higher for men and lung cancer incidence was 28 per cent higher than the rest of Sardinia in Guspinese territories. Abnormal trends for both sexes were found for urinary and respiratory diseases, cancers and particularly lung cancers in Iglesiente.

Taking Geopark seriously as a strategic factor

Evidence from health investigations clearly shows that the environmental recovery of Geopark territories should not be postponed. Two main elements of complexity can be seen. On the one hand there is the confrontation between the different decision making levels over management of the big green business of environmental recovery. In 2008, the Italian National Government entrusted the President of the Sardinia Region with the management of the environmental recovery process in 34 municipalities of the Sulcis, Iglesiente and Guspinese
territories. The regional government published in March 2008, a plan forming 6 macro areas of intervention with a budget cautiously forecast at around 310 million Euros (Autonomous Region of Sardinia, 2008). We can easily forecast that it will require more than 500 million Euros for the recovery of the whole Geopark area.

The second aspect is related to the level of investment required to support Geopark development. But this involves also the strategic vision of the mining territories. Regional economic and political elites show a contradictory attitude toward the Geopark. Even if the mantra of tourism diversification is a common argument in Sardinian debate, there’s a clear diffidence towards the Geopark as a local development actor. This is only partially justified by the influence of coastal tourism lobbies (especially tourism developers and building sectors operators) on regional development strategies. Again, even if the development for all discourse constantly emerges from political debate, an analysis of decision makers’ practices underlines the persistency of a different discourse. Considering Sardinia as a simple leisure space encourages the reproduction of a development model inevitably concentrating resources on the coastline, more and more represented as a place to consume. Furthermore, it is generally recognized that mining heritage tourism has low employment impact on the local and regional scale in the short term (Cole, 2004). Political discourses on employment and unemployment are a common rhetorical playground for Sardinian representatives of any political ilk. Geopark development is only marginally attractive in this sense. Difficult transport connections, poor tourism infrastructures and services, the open question of environmental recovery are among the conditions that limit tourism development and employment rate growth in the short term. In the background can be seen a gap between a theoretic (and sometimes rhetorical) adherence to Geopark development project concepts and the practice of local development planning that refuses to delegate to the Geopark enough power for it to become an effective development driver. And being that municipalities and their territories are the core actors of the Geopark development process a gap between local communities and regional development strategies clearly emerges.

The Sardinian provisions of regional law indicate municipalities as the final beneficiaries of the mining sites formerly owned by the regional government. Furthermore, the Geopark

<table>
<thead>
<tr>
<th>Intervention area</th>
<th>Analysis</th>
<th>Planning</th>
<th>Execution</th>
<th>Total costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro area Montevecchio Levante</td>
<td>1.500.000</td>
<td>2.100.000</td>
<td>59.000.000</td>
<td>62.600.000</td>
</tr>
<tr>
<td>Macro area Montevecchio Ponente</td>
<td>1.000.000</td>
<td>450.000</td>
<td>52.500.000</td>
<td>53.950.000</td>
</tr>
<tr>
<td>Macro area Masua</td>
<td>1.300.000</td>
<td>700.000</td>
<td>30.000.000</td>
<td>32.000.000</td>
</tr>
<tr>
<td>Macro area Malfidano</td>
<td>400.000</td>
<td>400.000</td>
<td>22.000.000</td>
<td>22.800.000</td>
</tr>
<tr>
<td>Macro area Barraxiutta</td>
<td>700.000</td>
<td>300.000</td>
<td>11.000.000</td>
<td>12.000.000</td>
</tr>
<tr>
<td>Macro area Valle del Rio San Giorgio - Iglesias</td>
<td>3.700.000</td>
<td>2.300.000</td>
<td>117.000.000</td>
<td>123.000.000</td>
</tr>
<tr>
<td>Orbai Mine Area</td>
<td>200.000</td>
<td>100.000</td>
<td>1.500.000</td>
<td>1.800.000</td>
</tr>
<tr>
<td>Su Zurfuru Mine Area</td>
<td>200.000</td>
<td>150.000</td>
<td>2.000.000</td>
<td>2.350.000</td>
</tr>
<tr>
<td>Ports</td>
<td>840.222</td>
<td>0</td>
<td>0</td>
<td>840.222</td>
</tr>
<tr>
<td>Total</td>
<td>9.840.222</td>
<td>6.500.000</td>
<td>295.000.000</td>
<td>311.340.222</td>
</tr>
</tbody>
</table>

Source: Autonomous Region of Sardinia, 2008.
is not included in the regional law between the possible owners of mining sites and municipalities are therefore facing enormous economic constraints in assuming control of the sites and justification of the maintenance costs in comparison with direct and indirect economic benefits. At the moment the transfer of ownership is only partially realized. IGEA Corporation has been created by the Autonomous Region of Sardinia (that is the only partner of the company) with the aim of coordinating the transmission of the mining sites property to local municipalities. IGEA is still in charge of the environmental recovery process, and of the implementation and maintenance of security standards in the sites but the company also manages the most relevant sites from a tourism perspective. Both economic reasons and the need to assure effective security standards, especially in mining galleries, are today the main limitations on including other actors apart from IGEA in the management of the sites. The mining technical knowledge is today in the hands of IGEA as a result of employing former mine workers with relevant skills.

Even imagining a separate management for galleries and the rest of the site attractions, it will be really difficult to integrate the different management strategies of a public body like IGEA and private actors involved in running mining sites. Overlapping responsibilities and a difficult role assignment process are the key questions to solve if regional government will aim to support this kind of public-private partnership. At the moment IGEA is granting the access to galleries and more generally to sites by the authority of the institutional mission the regional law defined for the company. Tourists seem to like the authentic style of the visit experience guided by formers miners who are still in charge of site maintenance, even if they have no specific tourism training. Nevertheless some critical issues in providing tourism services emerge mainly related to the public nature of IGEA. Sunday closure of the sites, no coordination with tourism private operators, reduced adaptability of working hours to visitors’ needs and rigidity in the management of the ticket selling process are commonly reported as limiting tourism development in Geopark sites. Last year for instance IGEA introduced new rules for ticket sales and tourism operators had to reserve at least ten days before visits and pay in advance for tickets.

Another organizational model is nowadays strongly supported by Geopark management. Some consortium agreements between the Geopark and municipalities succeeding IGEA in the ownership of mining sites have been signed in the last ten years. Several key elements are shared by the different consortiums developed in former years. A board of directors is normally created under municipal control. At the same time Geopark co finances at least 50 per cent of the costs of the consortium and private entrepreneurs start to be directly involved in consortium agreements. Furthermore, the Geopark is the very first case of a park accepted and supported by large majorities of local communities in Sardinia. Different from other park planning experiences in Sardinia, influenced in some ways by a politics of backwardness (Heatherington, 2001), the Geopark project has been obtaining the consensus of local communities. This process seems to imitate best practices observable in Europe and to potentially open up a strong involvement of local decision makers and entrepreneurs (Hose, 2007; Cole, 2004).

Together with the environmental recovery issues that transverse any development scenario in former mining territories, the main obstacle for an advance of the Sardinia Geopark is the uncertainty of the site transfer process from IGEA to municipalities. On one hand, the public company is the only Sardinian actor able to guarantee the technical support needed to maintain accessible mining sites and to preserve the mining knowledge heritage held by the few miners who are not yet retired. On the other the development of competitive tourism products needs the introduction of management mechanisms and expertise different from those of a
Public Body like IGEA. Regional decision makers are called to answer to territories’ efforts in redefining development trajectories and to support what is probably the first attempt to empower local communities in Sardinia by means of the Geopark tool. In conclusion, a shallow and only formal adherence to the UNESCO Geopark network would result in another missed opportunity for Sardinia.

References


