



WORK PACKAGE 6

FEASIBILITY PLAN

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1. Introduction

The present study, prepared with the contributions of partners and coordinated by Regione Autonoma Valle d'Aosta, is finalized to the realization of a general outline for the technical-economic feasibility of tourist-cultural mining valorisation.

The outline should be applicable by any partner in order to estimate the feasibility in phase of plan as in phase of successive checks.

Main objectives of mining recovery are:

- **to exploit mining heritage from the historic, cultural and touristic points of view;**
- **requirement to maintain a meaningful heritage of history**
- **Safety and/or reclamation of the sites.**

Various models exist for what concerns promoters (public agencies, societies, community of residents), ways of presentation, thematic contents, purposes, ranging from didactic ones to those aimed at a new economic development of communities.

Reutilization and exploitation of abandoned mining site can be hardly carried out without recovering the whole mining settlements because degradation of public spaces and buildings cannot be combined with the necessity to transform the site into a touristic attraction.

Nearly always the recovery of abandoned mining sites means also to plan activities of environmental reorganization. Sometimes there is an irreversible degradation of buildings (or parts of them), technological systems, instruments, documentation; this process may become even graver after having started a recovery of this patrimony. Consequently, procedures needed for reclamation and safety of the mining site represent a very delicate phase that may cause further damages or modify the authenticity of places and structures.

The abandonment of the mining patrimony involves also a progressive passing of knowledge and professions, typical of this productive field.

2. Considerations about mining museums and parks

Mining sites have been object of reconversions with historical, cultural and touristic aims for some decades (30-50 years). This kind of projects began to be carried out in Germany and England, but now they are well-known in other European countries, too.

The different kinds of projects can be summed up as follows:

Science and technique museums: collecting technical, scientific and historical documentations of mining and technical-manufacturer industry. These aspects are partially present in nearly all mining museums.

Anthropological museums: economic and work features of the mining activities.

Eco-museums: including together with mining activities, the whole territory in which local community is represented.

Park museums: valorisation of mining and industrial archaeology together with natural landscape. (Naturalistic laboratories, environmental education centres).

The main common features among all the experiences are:

- Projects supported above all by local communities in order to preserve historical heritage and to create economic resources.
- Public administrations contributing to find necessary financial resources (in some cases, collaboration with mining societies has been important)
- In many cases European financings were obtained
- Public finances cover nearly the totality of investments and contribute to management expenses; sometimes important local voluntary participation is present .
- **Management data generally show the difficulties to cover costs, but considering induced gains, cultural and territorial value, and budget becomes generally positive.** Gains comes essentially from tickets for visits, stores, services, bar and/or restaurant but also from

public contribution. In some cases other systems (such as shows, therapeutic use of galleries, etc). Have been attempted in order to increase gains.

3. Basic criteria in order to define the feasibility of the plan

We must first remember that a park or a museum does not aim at profit but at the valorisation of the territory and cultural improvement.

Collateral activities, new and existing services take indirectly advantage of this, also increasing employment, thus bringing wealth to the place.

Generally this is the main purpose of local development, even if sometimes it is not shared or understood by economic operators and local administrations.

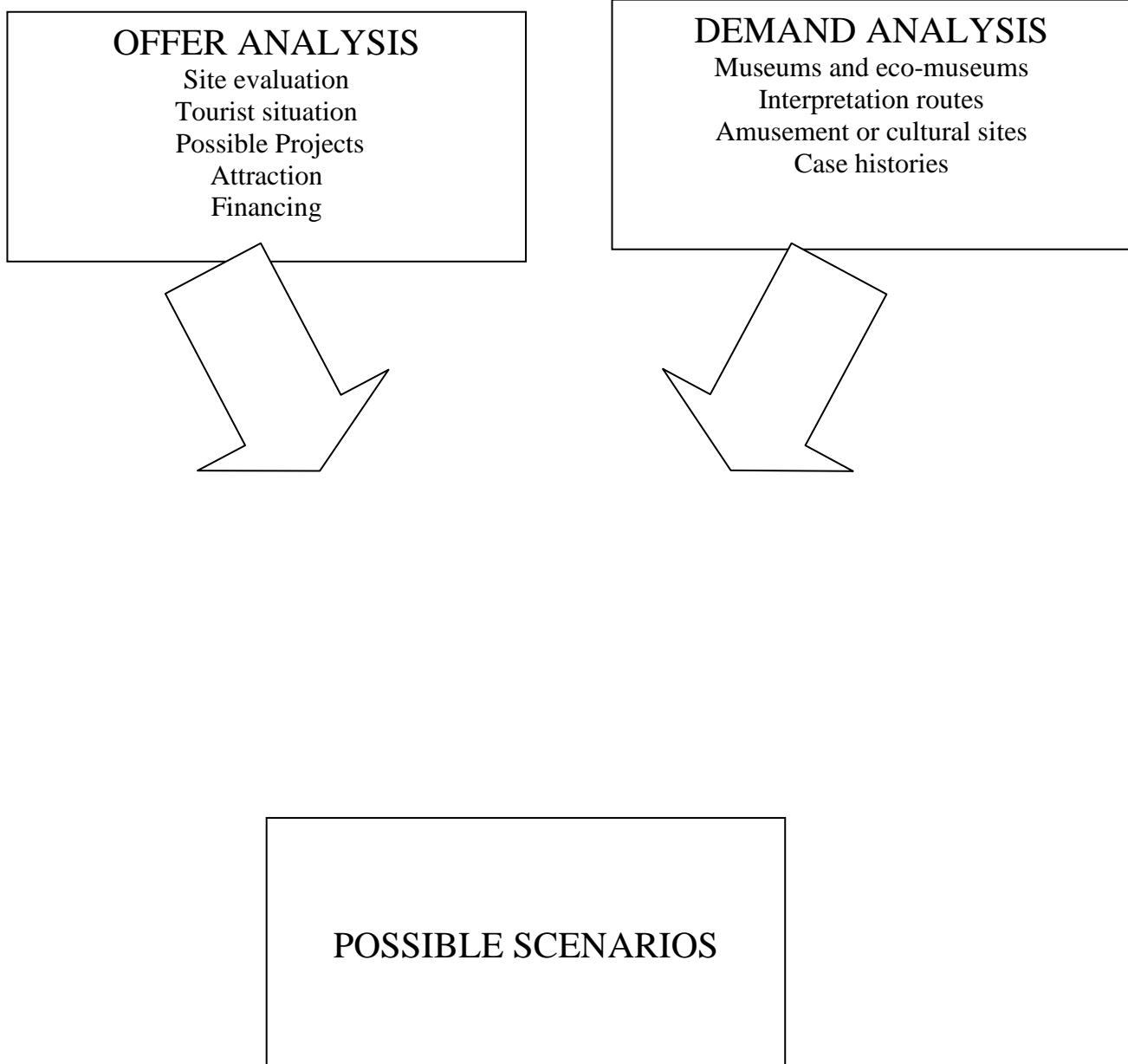
If it were so, it could also justify losses in the management of the only museum.

In order to choose sites to be primarily considered for touristic valorisation, it is necessary to carry on a cost-benefits evaluation involving:

- the possibilities of **economic return**, direct or through induced gains, and therefore the partial or total backing of investment and management expenses;
- **the cultural value that is assigned to each category of assets** according to the cultural, social and economic context, where measures of recovery of the cultural assets are taken;
- the evaluation **of the increase of the territorial patrimony** brought by the actions activated by the process under investigation using the concept of Territorial Added Value (T.A.V.)

The feasibility studies will have therefore to estimate the economic sustainability of the reconversion and to determine the costs of management..

For a correct evaluation of the development of the project it is necessary to consider:



For every scenario it is necessary to define:

- aims - possible products
- structures and organization
- legal aspects
- technical aspects
- economic aspects
- management modality

general development of activities.

It is basically important to understand if the necessity of recovery is a real requirement of the whole territory, if instead it comes from some parts of it, or from external needs.

The comparison of different hypotheses of valorisation and exploitation will have to lead to choose the best solution.

Then this solution should be checked more carefully by carrying out a further feasibility verification to define necessary works and their cost.

Each kind of touristic offers, also the mining one, should have appropriate qualitative standards of facilities to receive visitors, provide information, which should be necessarily linked to other territorial services, receptivity, including restaurants and hospitality broadly speaking.

Steps of the study are:

- 1) Analysis of the heritage patrimony (sites, documents, buildings, objects, culture, memory) and of the context surrounding it, with particular attention to the socio-economic situation and to the presence of other structures within the territory (especially touristic and cultural ones); study of the opportunity to reconvert the site with touristic aims and of accessibility.
- 2) Definition of the development outlines for the valorisation of the patrimony integrated in the context.
- 3) Definition of rules and guidelines for planning and managing procedures of recovery
- 4) Plans of reclamation, conservation, exploitation)

Firstly, in order to valorise these sites for touristic exploitation, it is necessary to make them accessible through:

- making the access ways sure and equipped with panels;
- valorising resources – providing documentations to make visits interesting;
- defining routes;
- providing scientific information;
- historical news;
- technical and various news (social, economic ones etc)
- promotion;
- organization of supporting structures
- guided visits;
- information centres - show rooms (stores, rest points)
- coordination of all different activities
- complementary structures (education centres, hostels etc)

It is very important to consider that all these activities should not be realized aiming at reaching the maximum flow of visitors and of tourist presences because this is not always the best target. Studies of feasibility and/or business plans estimate touristic flows generally more focused on how to achieve the break event point in a short period, than on the effective potentiality. Sometime an excess of visitors becomes unbearable for touristic structures, thus generating a decrease of interest, a negative element of marketing. Therefore an intelligent strategy of management will have to avoid pursuing a constant increase of visitors, and lead development following an efficient and environment friendly managing.

Guides adequately prepared and motivated have a key-role, an essential added value for this type of tourism. The mine needs to be told.

SWOT Analysis seems to be a good device for this kind of problems because it examines specific pointers such as points of strength, opportunities, points of weakness and threats.

STRENGTH POINTS

examples

- Good degree of authenticity of the site.
- Presence within the territory of many mines of different kinds.
- Expressed agreement from local administrations.
- Resources included in a context of high environmental value.
- Managing agency's experience in finding financings.
- Territory already equipped with tourist infrastructures.

OPPORTUNITIES

examples

- To safeguard and exploit a patrimony of great historical and social value.
- To increase local tourist offer.
- To create jobs.
- To increase the population's awareness about their cultural patrimony and cultural exchanges.
- To make laws to manage mining sites
- To remove serious danger situations.

WEAKNESS POINTS

examples

- Lack of a clear awareness of the existing patrimony.
- Necessity of works for reclamation and safety.
- Lack of specific rules about the availability and management of sites
- Too long periods of abandonment that have faded the ties between population and mining activities.
- Previous removal from sites of systems, machinery and objects.

THREATS examples

Complete loss of memory of mining activity

Getting worse of the decay of the existing patrimony.

Persisting of dangerous situations that can get worse..

4. Technical feasibility

In general terms any recovery is technically possible; costs can be much various following the single case (amount and quality of necessary works).

Elements to be defined first, are:

- property and legal conditions of mine, ground and urban planning norms.
- Minimum of necessary conditions for feasibility (not currently defined from specific norms and variously estimated throughout Italy and Europe)
- specific census of the sites examining particularly conditions of conservation, historical and environmental value, access ways, stability, sanitary risks (sanitary issues to consider: presence of asbestos, presence of radon....).

These elements are evaluated by competent offices of every state or region and can vary from a place to another.

In order to let people visit sites, at least outside, it is necessary to make access safe and close entrances of galleries with gates; these works can be made with fairly cheap expenses (ranging from some thousands to some ten thousands euros according to length and condition of the entrance and the number of them to close).

For mines visits it is instead necessary to guarantee the stability of the galleries, to have at least two ways out, and realize systems according to current norms; expenses may vary from some tens thousands to several millions Euros.

5. Economic feasibility

Costs and benefits analysis

- BENEFITS

Fruition, exploitation

Elements to be considered:

1) Possible customers

Number of visitors in other museums within the territory.

Number of visitors in similar structures in other zones.

Number of places available and tourist presences in the territory.

Definition of a possible surrounding area from which visitors can easily reach the touristic site, for example, covering distances up to 250 km, having a day or a week-end visit).

Presence of hotel receptivity and structures connected to tourism.

2) Gains

Direct gains (tickets, shops, restaurants/cafés)

Induced gains

New jobs

- COSTS

1) Studies and projects

Feasibility studies

Planning

Work management

(Possibility to divide into lots)

2) Works

Ground purchasing

Reclamation and safe making

Accessibility

External ways of visit

Possible gallery visits

Visitors centre
Museum
Cafés
Shops

3) Management

Maintenance
Administrative management
Promotion (brochures)
Ticket office
Caretakers
Guides

- **FINANCING SOURCES**

Generally in these kind of structures gains directly deriving from visitors do not cover expenses.

Public agencies
Private and/or societies
Voluntary service

Another important element is to define costs of works.

We propose, as an example, some average costs for realization:

(General costs for a first budget)

WORKS	COSTS
Making access safe	10,00 euro/m
Entrance closing	1000,00 euro/each
Outside visits, leaflets and illustrating panels	from 12 000,00 to 30 000,00 Euros, according to their complexity
Mining galleries reorganization	
• Stability	50,00 Euros/m
• Systems	50,00 Euros/m
Museums in gallery	10 000,00 euro/100 m of gallery
Museums in buildings	50 000,00 euro/100 m ²
Buildings	800,00 euro/ m ²

Another expensive element not easy to estimate, might be the removal of dangerous minerals (asbestos, radon, polluting substances etc)

These are general costs, without Vat and incidental expenses (technical expenses, unexpected events, acquisition, applications) that make costs grow about 40 - 50%.

The value of these procedures of reconversion is not only economic because, though in some cases costs might be expensive , we can achieve a series of positive targets like **the preservation of a precious patrimony of industrial archaeology, history and culture of local inhabitants** , together with many indirect advantages (**tourists** make local economy grow not only visiting mining sites but also through their expenses in cafes and restaurants, hotels, shops etc).

Moreover the presence of these structures can add value to other tourist-cultural attractions still existing on the territory. An additional aspect not to forget is the **creation of new jobs for local inhabitants**.

Realization should be planned in a flexible way because it might require further modifications and expansions, sectioning it into lots.

Synergies should represent the strength points of these actions:

- **external synergies** : promoting sites in wider contexts, like Iron-route projects and similar ones.
- **inner synergies**: mining and industrial activities will be presented linked together, so that visitors of a site may get informed about the opportunity of visiting other sites throughout the territory; this way to proceed will improve management because different sites may possibly be run by one single administrative structure, one single technical structure, and organize common training courses for the guides and common itinerary programs for visits.
- **synergies with other local situations** : the mine could be presented like a characteristic element of the territory and therefore itineraries including other historic, cultural and environmental elements will be possible .