

Survey and architectural recovery activities of semi abandoned villages as strategic actions towards the sustainable development of local economies

keywords / architectural survey, recovery, vernacular, historic centers

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Abstract

During the last decades many things have changed and have been lost in small historic centers of many countries. People want to update their own houses with the most modern features and, in many cases, there is the urge to improve the living standards. In the most isolated villages inhabitants are trying to find more contemporary places for themselves and fit into new structures. While their love for these old settlements has not diminished, some of the residents have moved towards the main cities in search of a modern lifestyle and new job opportunities.

At the same time some municipalities are very keen on protecting this cultural heritage and they do not want to accept any modifications by the owners. In order to achieve the ambitious goal of giving new life to these forgotten vernacular villages, governments must be aware that changes in the physical structure of old settlements are inevitable (and have been from ancient times) but that there is also a dire need to control these changes driven by economic activities.

In addition, in many vernacular villages along the Albanian coastline, legislation and mechanisms are necessary in order to start a building by-law implementation able to explain what to do in order to preserve the original structures: there must be a subtle change strictly linked to business activities both able to retain the quality of the buildings and enhance the local economy through the use of those structures. It does not have to be development versus conservation: the two issues should work together. Although an uneasy paths, full of economics and cultural obstacles, it is still viable if we really want to preserve this important cultural heritage.

Vernacular inputs

Recently, many contemporary architectural projects from different parts of the world, have highlighted an important fact: the majority of the designers' advanced solutions is closely linked to the respective local realities. These local initiatives, which are defined as vernacular solutions (inspired by vernacular inputs), are inevitably and permanently tied to the geographic, topographic and environmental features of their land of origin; nonetheless, they have the capacity to showcase new approaches towards a more efficient energy management, especially in terms of natural light and

overheating protection¹.

This new architectonic regionalism is driven by solutions developed in dissimilar areas and mediated by authors whose creative capacity, designing skills and knowledge originated from vernacular traditions. An ecological approach applied to the study of vernacular buildings reminds us that the layout, construction, and use of human dwellings are based on a wide range of factors. They are related to lifestyles and values concerning the social organization of households and communities. In principle these buildings are both a tangible and intangible cultural heritage that needs to be protected and



Fig1 / Case studies distribution from west to east: Brazil, Croatia, Albania and Nepal
source / drawing by Luca Rossato

enhanced by keeping it in use.

A human ecology perspective stresses that adaptive processes for sustaining settlements are based on both ecological principles and cultural practices. No site of an existing or future construction should be interpreted in isolation from all these characteristics; therefore, studies and survey activities, protection and enhancement of vernacular villages can act as best practices regarding these aspects. In this framework, the next pages will explore several research activities, carried out by the author, which are of great importance for many countries, especially the developing ones and those transitioning from centralized to free market economies. The described case studies cover several different interesting situations in Brazil, Croatia and Nepal and could act as inputs for the regeneration of the Albanian coastline.

Paranaguà Bay Villages, Brazil: urban and regional planning proposals

One of the main problems of the territory of Brazil is the economic stagnation and the underdevelopment of the regions that are not part of the metropolitan areas. This polarization of the development and structural imbalance highlighted by the geographical and morphological characteristics of the settlements creates negative situations of high-density populations in large urban areas and

marginalization in medium-small size centers. Referring to the current trends, the activities carried out in the region of Curitiba (capital of Paraná State) by many small municipalities had the objective, (considering the Paraná Urbano² state program designed during the '90s) of enhancing the cultural and socio-economic life of small towns.

Isolated Brazilian settlements are facing high migration towards big cities with the younger population willing to find new opportunities and lead a more contemporary lifestyle.

The proposals included new thematic routes and the upgrade of maritime and rail paths to guide visitors (the vast majority from Paraná state) through Serra's mountain, the waters of the bay and the beautiful coast in order to rediscover the natural environments and settlements which, as a result of an imposed isolation have retained different cultures and traditions throughout the centuries. In this scenario, the example of preservation, renovation and re-appropriation of historical heritage elements of Antonina city and its economic development due to the resumption of activities at Matarazzo harbour, are essential conditions for achieving the basic autonomy of these places.

After the identification of the main problems and strengths of the three municipalities (Antonina, Morretes and

1 / E.g., VEGAS, F., MILETO, C., GUIMARAENS, G., NAVALON, V., (2014) *Parameters of vernacular sustainability throughout the 20th Century architecture*. In CORREIA, M., DIPASQUALE, L., MECCA, S., *Versus. Heritage for Tomorrow*. Florence: Firenze University Press.

2 / See AAVV. (2002) *Programa Paraná Urbano*. Curitiba: Grafica Mikito.

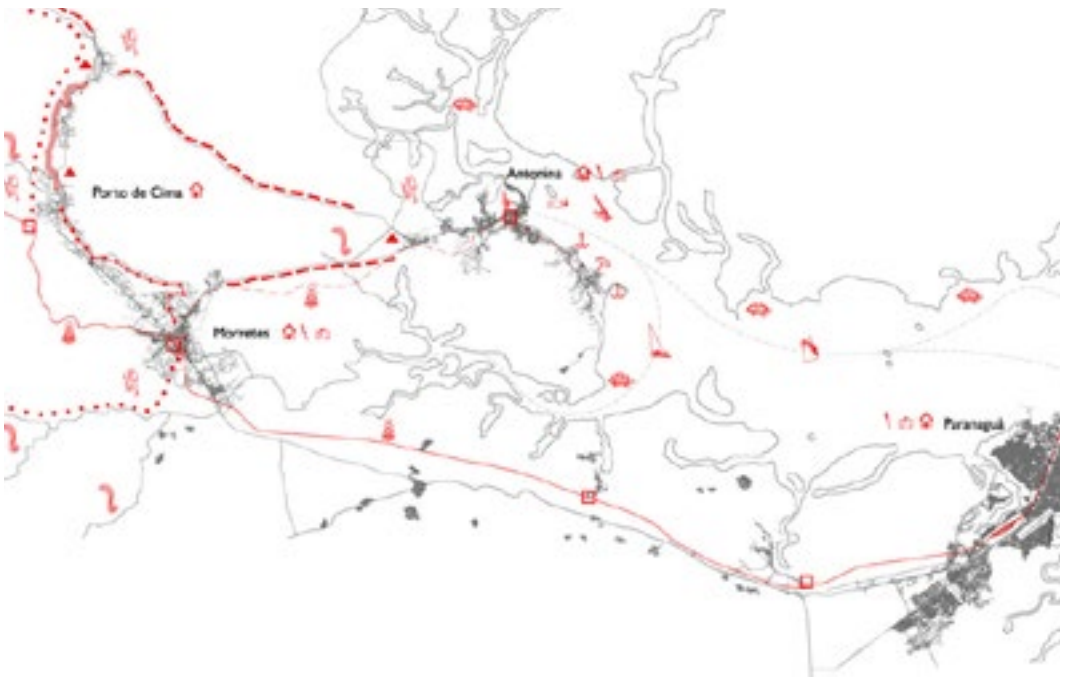


Fig2 / Regional survey for touristic activities enhancement
source / drawing by Rossato and Barbieri

Paranaguá) of the Paraná peninsula, a diagnostic study was carried out by the Architecture Department of University of Ferrara in order to structure a proposals focused on the presence of several interesting elements required to be analyzed at a larger scale (Brazilian unusual perspective).

An element of value is also the 120 km railway line that links the three centers to the capital of the state, Curitiba³; this important path, if used as in the past, would greatly facilitate the reduction of the problems related to the transportation of goods within the State to the exporting ports and would furthermore provide a suitable structure from a touristic point of view. The railway passes through a number of places of special interest and there are still about twenty of the old stations that, if specifically retrieved, may be used as touristic structures (info points, guest houses, handcraft shops).

A strong example of this opportunity is the Marumbi station, located within the boundary of a natural park that could easily be designed as an arrival point for whoever is interested in visiting the park and its amenities. In this circuit, there are some important coastal towns, the "Island of Honey" and Guaratuba (very famous from the point of view of the seaside eco-tourism) and others like Guaraqueçaba or the park of Superaguí, which are almost inaccessible and unknown destinations today but of great value and interest.

The objective of the regional masterplan is to take advantage of this net of opportunities and potentials and identify them as driving factors towards the new

development and the re-discovery of vernacular cities like Paranaguá bay.

Lubence, Croatia: quick architectural survey towards restoration

Exactly opposite Valun, along the range of plateaus that rises on the central part of the island and chained to the top of the hill is where the village of Lubence is situated, bravely resisting storms and wind gusts. The Romans, therefore, named this place Hibernitia (meaning like Winter), building an unassailable fortress that rises on top of a 378m high cliff, sheltered from the east by a protective wall with two doors. Traces of the village's glorious past, such as the gun slits and the portholes built in the fortress walls, are still clearly visible.

Life in Lubence goes on continually since the bronze age. The strategic geographic position of the settlement was always important in the village's evolution and existence, because from there it is possible to control the traffic through the Vela Vrata pass and organize an effective defense in case of an enemy attack from the local mountain ridge⁴. A wall and two city gates, one leading to the settlement from the southern road and the other from the north gate, are all that is left of the medieval fortification system.

The research proposed by the Municipality of Cres in cooperation with IUAV University of Venice aimed at implementing the survey on the conservation of the urban fabric in order to propose an urban restoration plan of the whole village. Lubence has 40 buildings and only 24 permanent inhabitants.

The monumental vernacular architectures

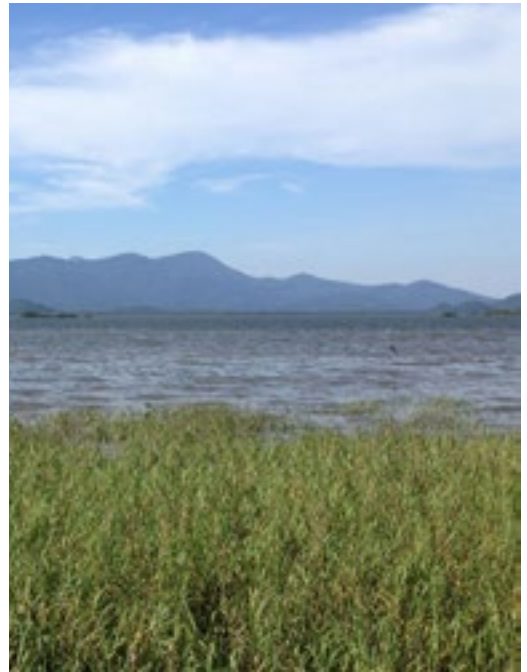


Fig3 / Abandoned vernacular house in Antonina (Paraná, Brazil) and the beautiful surrounding landscape / source Luca Rossato

with stone water reservoirs that are accessed by stone stairs are exceptionally well preserved. During the research, a survey on all the buildings of Lubenice was carried out: each building was inventoried with its own data, plans, elevations and photos and this data is made available to the municipality and the organizations involved in order to update the information. The survey has been implemented in the whole village and was carried out on each building taking into consideration the façades, their general condition, and the adjacent open spaces.

The data gathered through the survey had as a result a G.I.S. in order to better understand the main problems and issues. The survey form used during the research activity was organized into six parts:

- 1- information on the buildings;
- 2- information on the materials;
- 3- buildings categories;
- 4- evaluation of the façade conditions;
- 5- information on the roof and pertinences related to the buildings;
- 6- decay analysis.

The research group assessed the conditions of the external walls of the buildings in relation to their potential for restoration and re-use. The investigation was strictly visual only, and did not include testing of materials. However, the majority of the buildings appeared to be in fair condition structurally. After the quick architectural survey, each building was then redrawn using previous and existing

plans, all included into a new digital archive which will be a good foundation for a future restoration masterplan.

Based on site observations, it appears that the village would be a suitable candidate for restoration; the stone portion of the majority of the facades is in good condition and requires minor restoration.

Using the building's condition as an indicator, 3 groups of urban fabrics were chosen:

- 1 - Buildings in good condition (average restoration cost = 250 €/m²)
- 2 - Buildings in fair condition (average restoration cost = 600 €/m²)
- 3 - Buildings in a state of decay (average restoration cost = 1200 €/m²)

Following these 3 categories regarding the old buildings of Lubenice, a costs evaluation was completed in order to understand the amount of money needed for the total restoration.

After this research the village of Lubenice was included (2005) into UNESCO's tentative list regarding Croatia and it is awaiting the status of World Heritage Site.

Bandipur Village, Nepal: bringing town back to life

Bandipur was established as a point of commerce by Newar traders from Bhaktapur in the Kathmandu valley after it had been conquered in 1768. Originally a simple Magar village in the early 19th century, Bandipur developed into a prosperous trading centre and

3 / See NATANAE GRECO-FERLIZI, A.C., KUCZKOWSKI, F., (2010) *The train ride through the serra do mar, Curitiba: Clube de Autores.*

4 / Cf.: HOUSE S., HOUSE, C., (2004). *Mediterranean Villages. An Architectural Journey.* Victoria: Images Publishing Group.



Fig4 / Lubenice old village, Croatia: empty streets and amazing views
source / Luca Rossato

a community with town-like features: substantial buildings with neoclassical façades and shuttered windows and streets paved with slabs of silvery slate. Bandipur had its heyday in the Rana times (1846–1951), when, as a measure of its power and prestige, it was granted special permission to have its own library (still existing)⁵.

In the 1970s, trading fell into a steep decline with the construction of the Kathmandu – Pokhara highway. For technical reasons it was logically built in the Marsyangdi valley, leaving Bandipur isolated up on the mountain. In addition, as a result of its poor accessibility, Bandipur lost some of its importance because the district headquarters of Tanahu were moved to Damauli. The tradesmen of Bandipur were forced to move down to Dumre and many even left for Terai; Bandipur turned a semi-ghost town. The Bandipur Eco-Cultural Tourism Project was funded by the European Commission in partnership with two European cities that have considerable experience in sustainable tourism practices to share with Nepal.

This project has taken a unique approach integrating architectural, cultural, and natural conservation, local capacity building training, and promotion in its overall tourism strategy for Bandipur that allows for growth and changes, while protecting the natural and cultural resources for the benefit of the local population.

Cultural tourism, especially rural tourism in the Southern Asian countries is a growing attraction for international and domestic visitors seeking to experience the simple

way of life. This growing phenomenon is a blessing to the social structure and the economy of these rural communities where there is a dearth of other economic activities. In today's competitive global market, the tranquillity of rural tourism offers an attraction that survives on its uniqueness and cultural identity, which makes its conservation critical.

Nowadays the Bandipur market is bustling, tradesmen are working and, most importantly, tourists are arriving. In addition to the Bandipur project, the Bandipur Development Committee made the decision to stop any vehicles from entering the city centre and also several crucial solutions were adopted: GaunGhar, a popular, eco-friendly hotel, was one of the first buildings in Bandipur to be restored. The restoration helped return the once dilapidated run-down building back to its traditional Newari style, setting an example for others to follow and take pride in Bandipur's cultural heritage.

Very often this heritage is aggressively attacked by what could be called the "hybridisation process". The transformations mainly concern the roof's materials, substituted with metal sheets, simpler to conserve and cheaper to buy than traditional tiles⁶.

Another important transformation is the painting of the doors, the windows and the other timber elements, originally in wood. The heavy hybridisations like new storeys or volumes are not widely present in Bandipur and therefore the city appears as it was originally built. Presently, after these initiatives, there is clear evidence of a greater understanding by the people

LUBENICE - CROATIA
Gis Analyze: Evaluation



Gis Analyze: Endowments



Gis Analyze: Current Use



Gis Analyze: Preservation Conditions

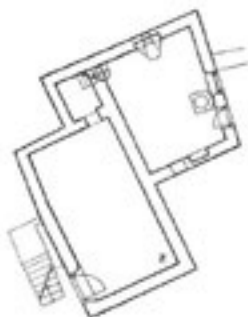


Fig5 / Graphic data extraction by G.I.S. of Lubenice old village source / maps by Allori, Corino, Rossato, Soranzo

Plans:



Ground floor



First floor



Second floor



Elevations:

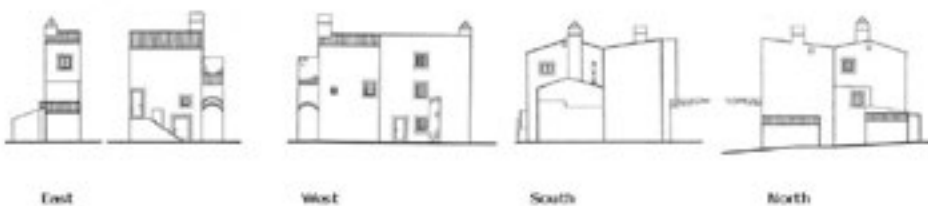


Fig6 / Plans and elevations of one of the 40 buildings of Lubenice old village source / drawings by Allori, Corino, Rossato, Soranzo

of this vernacular village specifically regarding the value and importance of their cultural heritage.

The funds available from all sources are sufficient for the conservation of the major monuments. In the meantime, a mechanism still needs to be developed in

order to provide financial support for the conservation and careful modernisation of the private houses, which form the bulk of the historic buildings and must be preserved if the integrity and authenticity of the village is to be retained. Conservation projects for a number of private historic

5 / See also KORN, W., (1998) *The traditional architecture of the Kathmandu Valley*. Kathmandu: Bibliotheca Himalayica.

6 / See GUTSCHOW, N., KOLVER, B., (1975) *Ordered space concepts and functions in a town of Nepal*. Kathmandu: Nepal research centre publications.



Fig7 / Vernacular houses and local traditions in Kathmandu Valley, Nepal
source / Luca Rossato

houses within the village should help encourage the practice of preservation and to recover some of the losses.

The Albanian southern coastline: a villages' net with high touristic potentials

Albania possesses unique ecological features that provide significant but under-utilized tourism potential, including coastal areas, mountainous terrain, rivers, parks, and protected areas (Kruja and Hasaj, 2010, p.5). The villages of the Albanian southern coastline are organically integrated in the landscape; indeed, the traditional villages of the region form a unique expression of vernacular architecture, distinctive for its locations and the use of local building materials. The visual features of these villages are an essential part of the attractive landscape of the area but they risk being ruined if local building traditions and materials are abandoned in favor of modern construction materials which are cheaper than the traditional stonework used to erect them. These houses of thick stone walls and tall windows are some of the finest examples of the vernacular style characterizing the Albanian Riviera's villages. The villages are a labyrinth of cobbled-stone streets but, despite their high tourism potentials⁷, currently it is estimated that only 10% of the original population living there after the Second World War still remains.

Most of the inhabitants who remained after the war relocated to the village during the Communist era or migrated to Greece in search of work.

In a future vision of sustainable local economic growth, tourism is the most

important source for the Riviera old settlements⁸. Its environmental and cultural heritage includes mountains and coastal landscapes, villages and local communities, traditions and identities.

In villages such as Palase, Dhermi, Vuno, Old Himara, Queparo, Piqueras, Ilias, the protection of the environment and the development of natural sources can be compatible only if based on a low environmental, economic and social impact of interventions.

Conclusions: eco-cultural tourism as possible economic source for Albania coastline

Conclusively, the objectives are the recovery and enhancement of semi-abandoned villages. These aims must involve the study of the process of human settlement in the territory over time, understanding the factors that have led to the changes taking place. If these sites could be effectively linked to each other in order to create a net of economic sources for the local residents, it would be possible to establish conditions for a market oriented and ecologically compatible tourism and the development of these places through contemporary types of tourism such as rural tourism, nature tourism, hiking, free climbing, biking, and so on.

Ecotourism is about uniting conservation, communities, and sustainability which entails the adoption of the principles below:

- Build environmental and cultural awareness and respect.
- Provide positive experiences for both



Fig8 / Views of Dhermi village, Albania: urban and architectural features that need to be preserved source / Luca Rossato

visitors and hosts.

- Provide direct financial benefits for conservation and financial benefits for local people.
- Design, construct and operate low-impact facilities.

The relationship between culture, heritage, the environment and tourism has received a great amount of attention throughout the world. Individuals or organizations representing these special

interests should work together on a local, regional, or national basis to define their common interests and discover ways in which they can develop a strong and mutually beneficial working relationship that conserves natural, cultural, and human resources. There is a need to create stronger links between historic sites and monuments, indigenous people in the host community and those individuals seeking a quality ecotourism experience.

7 / See KRUIJA, D. and HASAJ, A. (2010). *Comparisons of stakeholders' perception towards the sustainable tourism development and its impacts in Shkodra Region (Albania)*. Turizam. Vol. 14, Issue 1, 1-12.

8 / KRUIJA, D., GJYREZI, A., *The Special Interest Tourism Development and the Small Regions* Turizam. Vol. 15, Issue 2, 77-89.

9 / See FALASCA, C.C., *Il recupero dei borghi montani terramari come azione strategia per lo sviluppo sostenibile del sistema economico locale*, in MAIETTI, F., (2008) *Centri storici minori*. Rimini: Maggioli Editore.

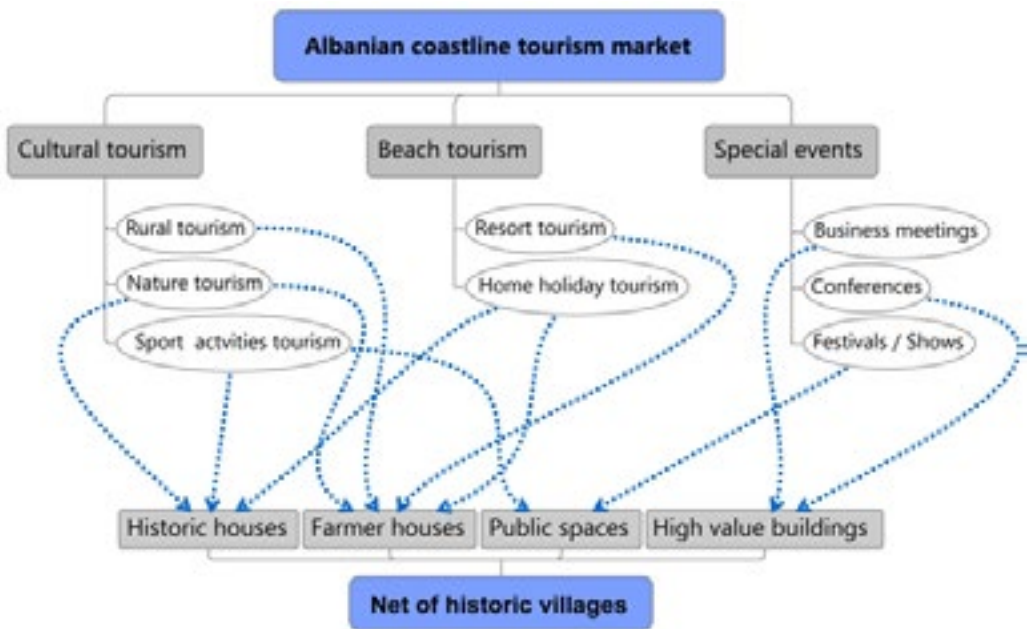


Fig9 / Possible interactions between local tourism and cultural heritage
source / scheme by Luca Rossato

Through this process, it is possible to also improve the life of indigenous people along the Albanian coastline but a very careful approach is required: at this time, most communities are more interested in attracting investments in tourism rather than in attempting to measure the environment and cultural impacts caused by a growth in the development of tourism. So, one approach involves the integration of ecotourism with cultural heritage tourism (travel with the aim of experiencing local traditions, arts, and heritage while respecting the host community and its surrounding environment). Cultural heritage tourism is an important phenomenon that should be part of all ecotourism products. People travel to see how other people live and to understand the natural environments that define their existence, culture and heritage which ultimately sums up a community's beliefs and values in a defined geographic area.

Reccomendations: a general methodology for a local economic growth of Albanian coastline villages

As shown in previous paragraphs, all the set of data, qualitative and quantitative, could contribute towards the understanding of the actual state of the places, in order to be able to define the potentials within the planning framework. The objective should be the obtainment of information through regional and architectural surveys, urban and social studies and SWOT analyses which might enable the systematization of all the available synergies. In this vision, the acquired data, particularly those relating to the villages stakeholders and

their accessibility help in defining the types and attitudinal profiles of individual settlements⁹.

In an effective plan the settlements should be classified according to texture and structural characteristics in distinct typological classes. Each settlement identified through this methodology must be further defined following the prevalent aptitude profiled in different categories of intervention, such as:

- consolidation / a set of actions aimed at the enhancement of inhabited settlements;
- resettlement / a set of structural measures aimed at encouraging the stable residential use of existing buildings;
- regeneration / which aims at the radical transformation of the model of use of the settlement's housing stock.

The display of attitudes of these categories of intervention could highlight the operative potentials of possible recovery projects in accordance with the criteria of compatibility and sustainability. The territory could be also divided into local development subsystems in which cells of integrated development would be identified and would contribute to enable the reactivation and subsequent proliferation of best practices totally or partially dedicated to different touristic activities.

Benefits could exist at both a local and regional level: on the one hand, at a local level there could be a more sustainable and endogenous economic development, population increase and building renewal, while at a regional level a positive influence on the development of the surrounding

area and number of visitors to the region (improvement of the villages' net) could be the result. Also, some impact indicators need to be identified in order to evaluate the effectiveness of a regional masterplan, as for instance the involvement of many experts and local stakeholders into the project in order to take it forward to the implementation phase and the consequent renewal of the buildings and increase in the level of dynamism and livability of the area. Among these, the most important indicator is very often the visibility of the results.

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