

METHODOLOGICAL PROPOSAL BASED ON INDICATORS FOR THE ASSESSMENT OF THE LANDSCAPE TOURIST POTENTIAL IN RURAL AREAS: THE CASE OF THE MUNICIPALITY OF ATLAUTLA (MEXICO)

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Tourism constitutes an enormous potential of development and current and future progress of society. Since the 60s of the twentieth century the attention on this activity has focused on the different variants of alternative tourism, understood as a form of diversification and also mitigation of the negative effects caused by traditional mass tourism. Most of these projects are located in rural areas where there are important natural and cultural landscape resources, scarcely valued, but susceptible to be taken advantage of. However, tourism being a complex activity, especially in developing countries rural areas, it is necessary to have planning schemes that ensure the sustainability of tourism projects. One of the proposed tools for the proper planning of this type of project is the diagnosis of the landscape tourist potential.

Two aspects are distinguished in the study of the landscape tourism potential. On the one hand, the works that use the landscape taxonomy to identify and characterize environmentally homogeneous areas at a certain scale, and establish their relationship with tourism activity. On the other hand are the works that focus on the inventory and valuation of tourist attractions, understood as any place, good, custom or event that is capable of causing interest to potential visitors so that they can have any type of recreational, tangible

or spiritual experience. Both approaches, landscape or attractions, provide valuable results to the subject, however they refer to different and complementary aspects of the tourism potential.

On the other side, it is worth highlighting from the operational point of view, the use of indicators as a frequent tool to evaluate in a precise and systematic way the landscape tourist potential. Its design, validation and application to specific cases allows deriving reference values with utility for diagnosis and, eventually, landscape intervention in the landscape. Under this methodological approach, in this research was identified and valued the tourism potential of the municipality of Atlautla, a rural town in central Mexico, applying a diagnostic method based on the indicators use. The method pretends the not very studied link, between the tourist quality of the landscape types and the presence of singular elements that constitute specific tourist attractions inside of them. Unlike other studies that are carried out in the operative phase or after the tourist activity, in this case the diagnosis can represent a very useful alternative to evaluate the possibilities of tourism development and ensure the projects viability in the municipality of interest. It could also be possible to extrapolate to new sites of rural characteristics which are not being exploited yet.

The studied locality is located in a mountainous ecosystem where four main types of landscape were distinguished: High Mountain, Middle Mountain, Pyroclastic Piedmont and Lava Piedmont. The landscape patterns in the different types of landscape are dominated both by well-preserved natural elements, as well as by extensive and diverse agrarian uses. The first consist of coniferous forests distributed on slopes, ravines and volcanic domes of the High Mountain and steep slopes characteristic of the Middle Slopes. Mixed forests (coniferous and broad-leaved) and coniferous forests are also well represented, which are distributed especially in the ravines, lava flows and hillsides of the Pyroclastic and Lava Piedmonts. There are as well alpine-type landscapes that correspond to grasslands and rocky outcrops distributed on slopes, headlands of ravines and volcanic domes partially covered by recent volcanic sands on the summits of the Popocatépetl volcano, the most relevant element of the landscape system.

The designed method included the classification and mapping of the presented landscape types in the territory studied. The tourist attractions inventory contained in each type was also carried out. A set of indicators (objective and measurable) related to the scenic, environmental and interpretive criteria of the landscape, was proposed as a basis to determine the quality of landscape types and local tourist attractions. The indicators linked to each one of the criteria were: a) landscape diversity, as an indicator of the landscape scenic value; b) spatial fragmentation, as an indicator of environmental stability; and c) representativeness / singularity, as an indicator of the landscape interpretive value. Finally, an integration and synthesis exercise was carried out with which it was possible to propose a classification of landscape types with greater or lesser tourist potential. This classification is likely to be used as a basis for the design of better-planned projects and as an instrument for managing the sustainable development of local tourism in rural populations.

The indicators used in this research maintain a balance, considering the physical, biotic and cultural components that allow the cohesion of the territorial structure of rural spaces,

in which a strong community collaboration is required. These indicators were selected with support from local informants related to tourism activity. The experience obtained in Atlautla during the study confirms the findings obtained in previous works, which states that the application of landscape indicators -evaluated directly in the field- facilitates the intervention of local social actors in the design and planning of projects tourism, becoming one of the main conditions for the success of this type of projects.

A set of variants with which interpret the general tourist potential of the landscape types that articulate the municipality are offered by the relationship between the quality of the landscape types and the inventoried tourist attractions. Thus, the landscape types with the greatest tourism potential are related to a greater number of tourist attractions or to the tourist attractions that are best valued from the scenic, environmental or cultural points of view. On the other hand, those landscape types linked to a lower tourism potential are associated with fewer possibilities of response to fragmentation and fewer resources, or to the presence of low valued attractions associated with a low diversity or representativeness of the landscape pattern.

The results suggest that the tourist potential in the municipality of Atlautla is supported in adequate quality landscape patterns, determined by a high diversity, a good state of conservation and a relevant presence of educational value elements. All this complemented by the presence of tourist attractions, which gives each type of landscape an added value, either by the frequency of these or by their quality.

The study has allowed to confirm that a wide diversity of landscapes are presented in the study area. This fits consistently with the different new modalities of so-called sustainable tourism. In this sense, it is possible to project its use, for example for mountain adventure tourism, agrotourism, mystic-religious tourism or nature tourism, to mention some of the most visible and immediate. Particularly, several attractions that may be the central object of the projects triggering tourism activity were identified. These attractions are basically those of medium quality value, from which it is possible to base the subsequent use of other lower quality attractions, integrating all of them in high quality landscape types. In this sense, the consideration of the landscape as a tourism potential through the integration of a set of objective indicators represents an interesting exercise in the integral assessment of the territory, which can contribute to the economic development of rural areas, positioning itself as one of the greatest exponents for the configuration of an integrated and sustainable rural tourism, able to respect and ensure the main characteristics of the affected areas.

An original proposal for the tourist potential assessment of landscapes in strong rural character areas is presented in this work. These areas are traditionally dedicated to agricultural activities that are currently in decline, but a high landscape potential and an interest of local communities for tourist activities development is presumed. The results in Atlautla started from considering that the landscape is a geoeological resource that synthesizes the natural and cultural conditions of a territory, some of which are susceptible to be evaluated as interesting resources for the tourist activities development in rural areas.

The pragmatic nature of the research and its method make it possible to establish practical relationships between the academic objective and the local communities perspectives and interests. This provides new approaches to the current scientific and institutional trends

which are promoting the importance of landscape as a tourism management tool. Also noteworthy is the integrative focusing of the work, mainly because most of the proposals present partial approaches, while in our case, the quality of the tourist attractions was integrated into the quality of the landscape types, functioning as an added value that increases the tourist potential of both. This enables a highly explanatory and systematic integral evaluation, with greater scope towards practical exploitation objectives.

It is expected that this methodological approach, based on the combination of criteria applied in two levels of tourism resources understanding (landscape and attractions), will be reproducible in other different rural communities, and that it will work in any of them as an instrument to sustain the adequate planning of local projects during the diagnostic phases. In addition, the proposed method is complementary to other proposals, especially those that raise the tourism social viability based on the direct participation of local communities as an essential element for the proper development of sustainable tourism projects.