EXTENDED ABSTRACT

TOURIST POTENTIAL LEVELS IN THE MEXICAN COAST LOCATED BETWEEN CABO CORRIENTES, JALISCO AND POCHUTLA, OAXACA

Oscar Reyes Pérez
Universidad Autónoma de San Luis Potosí
osrp@uaslp.mx
http://orcid.org/0000-0002-1433-9887

Xochizeltzin Castañeda Camacho
The University of Texas at Austin
xochizeltzin@utexas.edu
http://orcid.org/0000-0003-3312-3974

José Guadalupe Rivera González
Universidad Autónoma de San Luis Potosí
joserivera@uaslp.mx
http://orcid.org/0000-0002-2108-3963

Mayra Elizabeth Quiroz Acosta
Universidad Autónoma de San Luis Potosí
Mati_may11@hotmail.com
http://orcid.org/0000-0001-9588-714X

INTRODUCTION

The focus of this study was based on the tourist potential of the territory, which is defined by Neacsu et al. (2016: 13) as "the set of natural, historical-cultural, socio-demographic, and technical-economic components, scientifically recognized, quantitative and qualitative, and provides opportunities for the capitalization of tourism and functionality for tourism." Since this definition involves economic aspects, the approach of Strauss (1972: 8) was includedto point out the economic potential of natural resources (also cultural resources for this case). For Strauss, this potential refers to the "product that could be obtained from a natural resource unit by investing a certain amount of capital and labor; in other words, it would express the potential productivity of the capital and labor usedin the exploitation of the resource."

In Mexico, the Secretary of Tourism states the tourist potential is "determined by the way in which local sites make accomodation to offer touristic products and services to satisfy needs of leisure and recreation arising from national and international tourism" (SECTUR, 2005). Based on this assumption, tourism potential is conceptualized in this work as the set of physical-natural and human elements (social, cultural, political, and economic) existing in a given geographic space that can produce the influx of visitors from

different geographic scales. This in turn provides the favorable conditions for leisure and recreation and usually motivates the tourists'desire to return.

METHODOLOGY

The methodologies of tourist potential and probabilistic classification were combined to: 1) strengthen the statistical analysisrequired to conceptualize the tourist potential index, 2) facilitate the analysis of the results obtained, and 3) construct the cartography which reveals the territorial patterns of tourism in the study site. The tourist potential reference comes from Leno (1993) who established a quantitative and qualitative route to measure natural and cultural resources from Canal de Castilla. Likewise, Robert Thürmer (1982) with his economic regionalization approach contributed to the development ofprobabilistic classification. Both Leno and Thürner'sprocedures have been adapted tothe theory of Economic Assimilation of the Territory that has gained interest in geographic research in Mexico (Propin and Sánchez, 1998; Ciudad Juárez, 1999; Mendoza, 2001; Garcia Castro, 2007; Garcia Castro, 2011). Based on these approaches, ten steps were addressed to assess the tourist and equipment offer from the study site.

1. Researchers who have used the tourist potential index and the probabilistic classification method report three types of spatial reference units (UER, for its name in Spanish): the political-administrative boundaries (countries, states, municipalities), the geographic grid (squares and hexagons), and concentric areas (which can also be irregular polygons). For both first and second cases, field work is supplemented with physical-geographic, social, economic, and environmental data provided from specialized institutions. The delimitation of concentric areas, however, require a point of interest in the space. Therefore, the core information is the one directly gathered by the researcher. To reveal in detail the tourist activity in the study site,which comprises 32 municipalities, a geographic grid was usedby dividing the region into 901 UERs.

2. Afterwards, the process to select the variables was prioritized. First, the elements that make up the basicoffer were considered, i.e., natural and cultural tourism resources.Second, the supplementary tourist offer variables associated with leisure and recreation centers were chosen. Finally, the accessibility in the region for tourists to travel by land to the different tourist sites was assessed.

3. Once the variables for each factor in the tourist potential index were identified, each dataset was ranked according to five categories. For this purpose, the ranking method of the Organization of American States (OAS), as amended by Alvarez, (1987, p. 78) was applied, as follows: 5: international interest; 4: national interest; 3: regional interest; 2: local interest; and 1: resources with little or no interest. In addition, since there are territories where some of the elements examined are absent, the "0 hierarchy: null, which means the element is nonexistent" was used.

4. Once the components of each variable were sorted by hierarchical category, weighting factors were established to assign the relevance of each variable for the development of tourist activity. In this regard, Leno (1993) proposes that values be given in tenths of a point, so that the total adds up to one (1). In addition, Leno

assumes that any element is inherently relevant due to its nature and importance, suggesting that a constant K = 1 needs to be added up.

5. Next, three factors comprising the tourist potential index were calculated: Resource Factor (RF), Equipment Factor (EF), and Accessibility Factor (AF). The following equations were used:

- RF = VV + VTP + VCA + VRP + VATN + VRTC
- EF = VH + VAB + VST
- AF = (VDV x VP) + (VCC x VP) + (VG x VP) + (VCA x VP)

6. To obtain a general idea of the spatial patterns, each factor was mapped separately based on six hierarchies differentiated according to the theory of color, assigning warm and cold shades to high and low values, respectively.

7. To synthesize the three factors that comprise the tourist potential index in a single map, some probabilisticclassification procedures were used, such as the identification of combinations from the selected variables, the elaboration of typological clouds, and the development of a qualitative background map.

8. The hierarchy assigned to each factor was used for each UER to determine which and how many combinations resulted from the association of the three factors. For instance, for an UER with RF= 3, EF = 0, and AF = 0; the combination is 300; on the other hand, if for another UER the values are RF = 4, EF = 2, and AF = 2, the combination is 422.

9. Once all the potential combinations were calculated for the study site, their frequency was determined and UERs showing the same combination were identified. This information was used to elaborate typological clouds. These clouds have a center that matches either the combination of highest replicability or the combinations that are most similar to it. Through this methodological step, the southwestern coastal region of the Mexican Pacific was determined as having thirteen tourist potential levels.

10. Finally, these thirteen tourist potential levels were mapped using the qualitative background method.

RESULTS

The qualitative and quantitative assessments provided information for each of the 901 UERs in the study site. The cartographic representation of these data reveals various spatial patterns that evidence the following:

- Levels I and II correspond to areas with few natural and cultural elements of interest for tourism. Indeed, the local infrastructure to serve visitors in these sites is either minimal or nonexistent.
- Levels III and IV characterize territories where the diversity of tourist attractions increases, but given low investment in the construction of facilities, their potential for being incorporated to the main leisure and recreation centers in the region is low.

- Levels V and VI are places where natural and cultural diversity offers the potential for tourism development projects, although the supplementary offer represents the main limiting factor for successful implementation.
- Levels VII, VIII, and IX correspond to UERs with the highest natural richness in the region. As a result, they represent alternative and complementary tourism places where accessibility and tourist infrastructure should be promoted.
- Level X represents UERs with a consolidated road network and enough transportation means to link the major tourist destinations with the new leisure and recreation options.
- Level XI includes places that can integrate tourism corridors, given their relatively important natural diversity coupled with a tourist infrastructure under consolidation.
- Level XII represents sites where tourism is already seeking to be developed.
- Finally, level XIIIclusters places that are currently the main leisure and recreation centers in the region.

CONCLUSIONS

The methodological process established in this work revealed the ongoing dynamics of tourist activity in this portion of the Mexican territory. This approach provides spatial information needed by the various government levels of Mexico in the management of resources to be channeled for tourism development at regional, municipal, and local levels. From a territorial perspective, the maps allow weighting the existing socioeconomic contrasts across the coastal region of the Mexican southwest Pacific. They are useful to demarcate areas where the growth of tourist activity should be contained to reduce high levels of environmental vulnerability. These maps also facilitate the identification of sites whose tourism potential would increase through strategies that promote sustainable tourism. Finally, they evidence spatial patterns that would support theregional connectivity and development of tourism activities.