Comparative study Mexico – Colombia on tourist sustainability indicators: a tourist load capacity analysis

Estudio comparativo México – Colombia sobre indicadores de sostenibilidad turística: un análisis de capacidad de carga turística

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Abstract
The objective of this study is to conduct a comparative study of the tourist load capacity of MSMEs in the state of Baja California, Mexico and Bucaramanga and Medellín, Colombia. This study is quantitative, quantitative and transversal; The statistical sample consists of 522 tourist companies. The results show that both are as attractive tourist destinations and that important areas of improvement with regard to their tourist load capacity in each of the dimensions studied.

Keywords: sustainable tourism, sustainable development and load capacity

1. Introduction
In tourism planning and management, the impact of activity on the local population is a constant concern, directly related to sustainable development with its pillars: economic, social and environmental. That is why, when talking about sustainable tourism, its main objective is to minimize the negative aspects of the communities in which it is located, while maximizing the benefits for all involved, promoting local economic activity and respecting cultural uses and traditions. In this sense, the qualitative analysis of the levels of tourist use in cultural events and festivities in both Baja California, Mexico and Medellín and Bucaramanga, Colombia, in relation to the line that defines the capacity of cargo, is an information that turns out to be of great interest.
for the management of the typical events of these cities, since it allows to detect and identify in advance recurring problems, through the collaboration of the private sector and the government.

Load capacity is used as a tool for measuring indicators of sustainable tourism (social, economic and environmental); what it implies, the planning of the volume of visitors that can be received by a region or tourist destination, without exceeding its limits to the point where the damage is irreversible (López & López, 2008). To do this, the impacts caused by visitors in the region studied must be taken into account; as well as the perceptions and expectations of the study participants. In this sense, it is recognized that it is in the social act of humanity (organizations and people) that concern for the environment must be present, in order to preserve nature and guarantee the survival of both those present and the future generations. (Terreros, 2014)

Based on the above, the ideal sustainability indicator to know the current state of the different tourist destinations is the implementation of tourist load capacity from the institutional, economic, urbanistic, ecological and psychological perspective; information related to the situation in which the cultural events and festivities of each tourist destination are offered.

Sustainable development is one that provides a balance to the planet through three important areas of development such as social, economic and environmental, taking as a reference that none of the renewable resources mentioned can be over-exploited based on the needs that the current generation creates; these as such have to know how to manage resources in a certain way that they can offer to future generations, the use of resources consciously, conscientewish which will make the resources sustainable (Menendez, 2005).

Finally, it is important to mention that this study is the first in its class; after a thorough review of the literature, several studies were found on the application of the tourist load capacity limit method at a particular event; or only cover the environmental aspect, while this work presents a comparative analysis of the limit of the load capacity of the tourist mipymes of Baja California against those located in Bucaramanga and Medellin Colombia, during the realization of their most representative cultural events and festivities, under the opinion of the entrepreneurs who participate in some way with the offer of some type of tourist service during those events.

2. Methodology

For the compilation of the data, a structured type survey was designed with 70 items; which was subjected to reliability testing of Cronbach's Alfa; obtaining an index 0.704, implying that the instrument used is highly reliable.

It is a qualitative, quantitative, descriptive, transversal study; the sample consists of 320 tourist companies from the State of Baja California and 202 from two cities in Colombia, the distribution of the stratified sample is presented in the following Table 1. The calculation of the sample for the case of Baja California was estimated from the total universe, equivalent to 12,002 tourist Mipymes of the entity registered in the database of the National Directory of Economic Units (INEGI, 2019), a level of confidence of 90% and an error of 10%, the calculation was made using the formula for finite populations:

\[ n = \frac{Z^2 \cdot N \cdot p \cdot q}{e^2(N-1) + (Z^2 \cdot p \cdot q)} \]

in the case of companies located in Colombia, specifically in Bucaramanga the same method whose population obeyed 4,093 Mipymes registered in the database of the Chamber of Commerce of Bucaramanga was used, however for the case of Medellin the sampling method was non-probabilistic and of convenience;
Table 1
Data sheet distribution of the stratified sample by municipality

<table>
<thead>
<tr>
<th>Country</th>
<th>Municipality /Department</th>
<th>Population</th>
<th>Sample</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Ensenada</td>
<td>2100</td>
<td>66</td>
<td>320</td>
</tr>
<tr>
<td></td>
<td>Rosarito Beaches</td>
<td>647</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tijuana</td>
<td>5420</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tecate</td>
<td>365</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mexicali</td>
<td>3490</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>Bucaramanga</td>
<td>4093</td>
<td>152</td>
<td>202</td>
</tr>
<tr>
<td></td>
<td>Medellin</td>
<td>Unknown</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>522</td>
</tr>
</tbody>
</table>

Source. Own elaboration based on the study of the sector.

The model used is the Tourist Load Capacity; this concept is firmly associated with sustainable tourism, it is used to respond to the problems generated by mass tourism, allows to rationalize the abuse and deterioration of the resources that underpin the activity (Matos & Del Valle, 2019, pp. 78-79). The classification model proposed by López, J.M. & López, L.M. (2008), establishes six dimensions that must be analyzed to measure the limit of tourist load capacity: institutional physical, orrbanista, cultural, and economic, optional, psychology of the resident and tourist.

3. Results

The load capacity is recognized as a basic index of sustainable tourism, which provides reference information if the tourist activity of a locality has exceeded the limits of the different dimensions that make up it, under the perspective of the entrepreneurs participating in this comparative study between Baja California, Mexico and the cities of Bucaramanga (Santander) and Medellin, Colombia. The five (5) dimensions correspond to the capacity of economic, ecological, urban, institutional and psychological burden; the analysis makes it possible to know whether any dimension has been exceeded, is below the limit or is about to exceed it, with respect to the availability of any of the factors studied. This is how this load capacity analysis turns out to be an excellent planning and management tool.

3.1. Section: attendance data

Data regarding tourist service users

Regarding the type of users of the tourist services studied, it was identified that there are three types of attendees of the tourist events planned in the cities taken as a sample: residents, the national tourist and the foreign tourist. The sample was behaved as shown in Chart 1. In all the tourist destinations studied dominated the resident as the customers who provide greater profitability to the businesses of the tourism sector; not being the case with Bucaramanga establishments, since the entrepreneurs claimed that it is thanks to the national and foreign tourist that they are competitive.

In this sense, the Secretary of Tourism of the State of Baja California ⁴ (SECTUR, 2015, p. 2), established that the tourist expenditure of agosto as of December of that year, is predominantly due to the participation of the residents of the entity up to 82%, and 9% of tourists and foreigners respectively. Similarly, the Secretary of

⁴ Figures from the last census.
Tourism (SECTUR, 2019), states that Tijuana and Ensenada concentrates 6.8% of the international tourism that is received in the country, positioning Baja California annually in one of the five destinations with the highest flow of foreign tourism. In relation to the number of visitors who have had the establishments, it was found that they have mostly had an increase, yielding an average of 21.22% increase compared to the previous year (See Graph 1).

![Graph 1](image_url)

Graph 1
Type of customers

On the other hand, the Secretary of Tourism (SECTUR, 2018) reported an arrival of total tourists to the entity of Baja California equivalent 3, 676,009; which puts it only 10.12% below the national average. For its part; in Colombia, the tourist expenditure recorded from January to August, was 2,865,070 million passengers, which recorded a 2.9% increase compared to the same period in 2018, which strongly impacts Colombia’s economy. Of that total income, 2.2 million are non-resident foreigners, 479 thousand Colombians living abroad and visiting the country; and 215 thousand were passengers on international cruise ships (La República, 2019).

However, faced with the question asked to the participants about their attendance at some cultural or tourist event in the State of Baja California - Mexico, 55.3% claimed to have done so mostly in the municipality of Tijuana, and 14.1% responded not to leave their locality; in Colombia 68% year without presenting inter-municipality mobility.municipio.

### 3.2. Data on economic units

**Classification of companies by type of activity**

This research will address actual data specifically within the tourism sector, covering the Economic Units (EU) whose main activity is to bedefects in temporary accommodation and pre-paration of food and beverages mainly. de pre There was a greater participation of the economic units dedicated to the preparation of foodandbeverages up to 77% for the state of Baja California and up to 71% for Colombia..

**Size of companies**
With regard to the size of the participating companies, it can be observed that, in the case of Mexico, predominate those who have up to 5 employees with fue 36.6% in the state of Baja California and in Colombia up to 40%. Baja California, in contrast to Colombia which was in 2014 (See Graph 2).

3.3. Socio-economic and demographic data

Sex

The total sample studied amounts to 552 subjects of study; the same as being distributed by gender and country of the following form (see Graph 3); in Baja California, the predominant average is made up of women by up to 65%, while in Colombia the outstanding average of up to 47% is made up of males. The population of the State of Baja California, according to estimates by the National Population Council (CONAPO), for 2014, amounts to 3 million 432 thousand 944 inhabitants, with 50.3% male and 49.7% women (COPLADE, 2014). In the case of Colombia in 2018, the female population was a majority, with 25,229,644 women, representing 50.82% of the total, compared to 24,419,041 men who are 49.18%. (Expansion, 2018).

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5 This census is conducted every 10 years by INEGI.
Age
The distribution of the ages behaved as shown in the following Table 2, mostly indistinctly the participants are 30 years old, the overall average is 34 years in both countries. However, it can be observed that on average Colombian entrepreneurs are older than Mexican entrepreneurs. Similarly, it was identified that in Mexico women begin to work at a younger age, on average at 15 years, because the businesses are mostly family and must assist their parents in the activities of the business. It was also found that in this country men must work until the elderly due to the informality of their businesses and the lack of a pension and retirement program.

<table>
<thead>
<tr>
<th>Media</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>34</td>
<td>41</td>
</tr>
<tr>
<td>Mexico</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>Colombia</td>
<td>33</td>
<td>39</td>
</tr>
<tr>
<td>Fashion</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Minimum</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Maximum</td>
<td>74</td>
<td>89</td>
</tr>
</tbody>
</table>

Family core size
The National Institute of Statistics and Geography (2015) mentions that in Baja California, an average of 3.4 people typically reside per household; Oviedo (2019) mentions that the average in Colombia is 3.1. Based on the above information, the size of the family nucleus of the owners of the establishments studied was identified, noting that the group of 4-6 members is the one with the highest percentage in all cases, as can be seen on average exceed 50% of establishments of this kind; (See Graph 4).
Area where you live

The National Institute of Statistics and Geography (2010) mentions that, in 2010, the population of Baja California was located mostly (92%) in urban areas and the remaining 8% in rural areas. Based on this data, the mean of the sample (41%) are located in the central area, while 49% are located in the urban areas of greatest tourism of the municipalities; and only 12% are located on the peripheries of the qualities in question; indicating, a growth towards the surroundings of the localities studied, derived from the population growth that the state has suffered in the last decade.

In the meantime; in Colombia the average of the participating Msymes behaved as follows: 34% are located in the center, 49% in urban areas and 14% outside each municipality (city). In this regard, the National Census of Population and Housing -CNPV- 2018 (DANE, 2019) reveals that Colombia faces a massive recreation process, speaking that about 98.43% of its population lives in urban areas on average (headers), the restant and 1.57% live in rural areas. (See Graph 5)
Employment situation (position it occupies)
With regard to the employment situation of the respondents, it is noted that of the globally studied population the prevailing average is that of employees in both countries. Showing a greater share of its owners in the city of Mexicali by up to 29.9%; however, in Tijuana administrators are also involved in the realization of events and decision-making (see Graph 6).

Graph 6
Employment situation

Source. Own elaboration based on the study of the sector

3.4 Section: Load Capacity Data
This section of the document presents the results aimed at obtaining information regarding the load capacity of the different tourist destinations studied. So it needs to be divided into five subsections:

Institutional: focuses on measuring efforts by the government to regulate and control tourism care.

Security
This factor of the tourist load in accordance with the State System of Civil Protection Baja California (s.f.) in Article 32 mentions that the safety and development of events or activities in open areas of a tourist nature will be in charge of civil protection in case of contingencies. Therefore, if there is security at outdoor events, but people may not be aware and may not notice it. While, in Colombia, FONTUR (s.f.) mentions that tourist political security is a primary function that is in charge of the state, based on article 1 and 2 of the constitution, in which a disaster risk management policy is adopted; the strategic tourism security plan.

Widespread in both Mexico and Colombia, the population studied considers in one way or another the actions, measures and services that depend to some degree on the state government are insufficient during the celebration of local festivals. One of the services of greatest concern to residents of the different tourist destinations is safety, because on average 1128% general is not aware of whether such events attend the municipal police or if there is some kind of private security, arguing that they have never seen them; coupled with this; because only 72%(average) of the sample of participating entrepreneurs from Baja California, Mexico say that if they have these services during the festivities of their localities, while in Colombia the average is exceeded in this regard, up to 77%.

Transport
The next factor to consider in the administration of the tourist cargo, is the provision of public transport during the festivities; In this regard, the Industrial News (2018) reports that in Baja California public transport users
repeal approximately 20% to 40% of their respective salary for transportation. Emphasizing in this way that the transport service in the entity is in poor condition, both the transport units and the service; they also rate fares as very expensive.

Moreover, Colombia.com (2019) states that transport prices vary in each region; even mentions that its prices are affordable, economical; in general, they rate the public transport system as efficient, and in very good condition; With the exception of users of this service in the town of Bucaramanga, they rate it as expensive and that the cost benefit ratio is not the one indicated, since there are collapses in buses, delays and poor service.

Based on the above information, the data obtained show a public transport service made available to visitors mostly precarious and hasta null mostly (80%).

Health Services (Bathrooms)
Similarly the availability of toilets (public toilets), is also considered by most visitors as a necessary service, which is certainly not offered in the most optimal conditions, and there is no balance between the number of visitors and the number of toilets available during the holidays, which causes a dissatisfaction when participating in the events, which would disremember with it the quality of the service itself, where, the micro-entrepreneurs of the companies of Baja California negatively described this service (average of 70%), compared to Colombia that presented an also unfavourable average of 87%.

Food stalls
With regard to the offer of food stalls for the celebration of the local festivities, it is clear that, in Baja California, Mexico the city of Ensenada is the one that claims to be better prepared with this type of services, for the most part its festivals are related to its gastronomic port culture (80.3%); while in Colombia the average was 64.55%.

Information services
Finally, at this stage of analysis of the tourist cargo, it was in place in relation to the services of attention and information to the visitor offered during the events and festivities organized by the city council of Baja California; in this sense, opinions were very dispersed, but if you consider the general average; Mexican entrepreneurs felt 68% that information was bad and scarce, while Colombians stated at 40% that if information was given but not enough.

With regard to those who should advertise and promote local festivities in order to achieve tourism sustainability, on a global basis; in Colombia, the average is up to 60.9% and they believe that it should be done by entrepreneurs and government alike; whereas in Mexico, opinion is very divided by municipality; in Tijuana believe that companies are directly responsible for this work by up to 55.20%, Tecate (58.6%) and Ensenada (54.5), the above stemming from the lack of confidence in the municipal government and the curve of the experience of micro-entrepreneurs

For her part, the Secretary of Tourism (SECTUR, 2014) carried out the "Mexico North Program" where she integrates the states of the Northern Border of Mexico, such as Baja California, Chihuahua, Nuevo León, Coahuila, Sonora and Tamaulipas, with the aim of positioning themselves as safe, attractive, quality and clear national tourist destinations, this with the aim of creating jobs, capturing currencies and promoting the social and economic development of the region.

Given the above, the sample studied established up to 51.5% that the state government administration if it performs promotional and advertising actions to boost local festivities; however, they consider that it is not appropriate because it does not have the desired impact on the profitability of its business. While Colombian entrepreneurs perceive the government’s share mostly insufficient, with an average of up to 36%.
Economic: focuses on prevailing the equilibrium state of the economic environment of a tourist site.

Benefits
Ayala (2019) presents an interview with the head of the Secretariat of Sustainable Tourism Economy (SEST) of Baja California, where it is emphasized that tourism and its events is one of the most important activities for the economy at the state level, since it participates with more than 10% in its Gross Domestic Product. For its part, the Ministry of Industry, Trade, and Tourism of Colombia considers a contribution to the Gross Domestic Product of about $37.3 billion pesos from this economic activity, maintaining a growth of 3.8% per year (Vanguardia, 2020).

By asking the participants of this study to what extent they considered that the city's companies benefit financially as a result of the arrival of visitors attending an event, festival or tourist spot; in general, they consider these activities if they attract an increase in their economic benefits; with the exception of Bucaramanga Colombia, where they did not know or did not want to answer anything by 50.7%. In all right, I did so; overall, the total sample studied states that its sales have increased by 10 to 30% compared to the previous year.

Similarly, more than 70% of the population studied is aware of the multiple benefits that tourism brings with it, which are reflected in its locality; giving less importance to the fact that its actions favor responsible consumption – on average 3.4% – and the fact that they do not finish appreciating the natural riches with which they have been blessed in abundance - on average 5.17%-, which allows them to generate economic resources from their characteristic flora and fauna; the above is because they are mostly artisan micro-entrepreneurs who obtain their inputs directly from land and water, and that these natural resources are also given too much in their regions. However, they enhance the fact that tourism activity boosts the consumption of local products on average by up to 22.42% overall and integrates local communities and tourism activities by up to 21.20%.

Negative Impacts
In this regard, the study subjects did not show any negative impact on the regional economy. Since, they do not consider inconsistency with other activities relevant, but complementary (up to 75%); with regard to macro-environment speculation and inflation, they saw no change until November 2019 in a generalized manner; on the other hand, as regards labour seasonality, they state that their activities are not affected by the seasons of the year since they are tourist sites by nature the flow of visitors is stable during all seasons of the year (general average of 80%); in relation to distortions in the local economy, they affirm to 68% that their staff take care of their jobs, this is because they are mostly family businesses up to 78% as an overall average; finally, they mention that the economy of the localities studied do not have an excessive dependence on tourist activity since as previously mentioned, their main customers are the same residents of the tourist destinations studied.

Positive Impacts
As for the opinion of the participants regarding the economic benefits derived from the celebration of their cultural events and local festivities, the distribution of the sample behaved as follows: the general average in Baja California prevailing is the preparation of food and beverages by up to 36.2%, while, in Colombia, temporary accommodation dominated with an average of 48.2%; it should be noted that in Bucaramanga Colombia, respondents believe in up to 36.8% that the most benefited are retail, this due to the large number of informal establishments that have been reported at the end of March 2019 in Bucaramanga (539,000), registered by the National Administrative Department of Statistics (Dane, 2019), at least 54.4% were in informal working condition, i.e. out of every 100 jobs 54 were informal (Ruiz, 2019). (See Graph 7)
Increased employment
With regard to employment if there is an increase of up to 25% in a general way, but it is the product of the decembrian times and the festivities, which implies that once these celebrations are over, all that economically active population is unemployed.

Urban planner; refers to the usability status of the infrastructure.

Restaurants
La Secretaría de Turismo (s.f.) reports that the gastronomy of Baja California is complemented by the tourist offer, as it is the main reason why tourists visit this region (32%); to enjoy the gastronomic diversity. On the other hand, the magazine Dinero (2018) mentions that Colombian gastronomy motivates the visit of foreign tourists, since they are interested in knowing the offer of the gastronomic diversity of the country. In this way thanks to the gastronomy, a greater flow of visitors and therefore more tourism is generated.

Accommodation
With regard to the accommodation service, the Secretariat of Tourism (SECTUR, 2018) mentioned that, at the end of 2018, the statistical compendium on the hotel activity of the state of Baja California, recorded more than 1.9 million rooms occupied, resulting in an average hotel occupancy of 59%. Thus, they claim that during their tourist events, they maintain a tourist load capacity considered within their permissible quality limits of up to 72%; as far as Colombia is concerned, they handle very similar opinions (68%).

Access routes
On the issue of air mobility, Tijuana B.C. airport; had a growth rate of 13.8%, equivalent to 8.9 million visits with respect to the previous year; which puts it in the second tourist destination nationally for its dynamism; Guanajuato airport is the one that ranks first with a growth rate of 18.2%; however, its perception of visitors did not exceed 2.6 million (Ayala, 2019).

In this regard, the entrepreneurs studied stated that the government considers infrastructure as an indicator of the sustainability of tourism with an overall average of up to 51%, not only during the festivities of the region,
but permanently maintains the access roads in optimal conditions (58%); however, they recognize that it is an area of opportunity to improve, since they create 68% that the distribution of physical spaces intended for tourist activities are not adequate to the tourist load that is normally served, which hinders local transit.

Therefore, the remote can affect the attendance of events; however, it would not be the remoteness traveled but the proper provision of transport services, the conditions of the roads and the cost of the different types of transport. Similarly, it is important that government agencies make efforts to ensure the safety of their cities, especially at the most tourist sites such as fairs, cultural, recreational and historical centers. This, will allow the tourist to have greater confidence to participate in these events offered by the communities and therefore the entrepreneurs will be able to increase the profits.

**Parking lots**

Another service that was found to be insufficient in both countries by up to 75% and Null up to 25% was parking; this, due to the lack of inclusion of the micro-entrepreneurs of the region in the events planned by the city council, which hinders the visit and stay of tourists in the town, disturbing the peace of its residents; however, mobility needs to be improved as saturation of public spaces is unavoidable, public parking lots are insufficient and main access roads are often blocked, causing widespread chaos on the streets and their community.

**Places of recreation and leisure**

With regard to the preferred places of recreation and leisure by tourist destination, it was identified that the event that presents the greatest participation by the Mipymes subject to study in the state of Baja California are: "Entijuanarte" up to 46%, registering in 2018 the participation of approximately 50 thousand attendees in the event (Gutiérrez, 2018); while in Colombia the preferred destination is Santiago de Cali, up to 60% having as main attraction "the Fair of Cali", being the most important event of the Colombian West, in 2019 it is estimated that approximately 1'034,000 people participated according to study carried out by the Javeriana University (El País, 2019).

**Ecologically, this indicator measures the respect to the flora of the town and its wildlife**

Regarding the protection of flora and fauna, participants were asked if they considered that plants, trees, rivers, beaches, nature reserves, among others; were respected by visitors during cultural events and festivities, to which the Mexican average replied that if even 59.3% and the Colombian in 71.8% in regard to the care and preservation of animal species; but did not feel the same with regard to the care of natural areas because they claim up to 73% on average Mexican entrepreneurs that nature reserves, parks, archaeological ruins, beaches and other spaces used as areas for ecotourism are not properly preserved, most often causing irreversible damage. With regard to the opinion of the entrepreneurs of Colombia on average they thought at 89% that, if they were respected not only by tourists, even by the residents themselves.

### 3.5. Psychological

#### a. Negative consequences

On the other hand, local entrepreneurs have been asked whether they consider that the opinion of the residents is taken into account when organizing and planning local events and festivities; to which they mostly responded negatively (56%), 28% preferred not to comment and the rest indicated that if they took their opinion into account; however, the recurrent complaint of the respondents was the lack of communication with their community.

However; the studied population average of the state of Baja California (48.21%) believes that, with the celebration of the various festivities and cultural events in their localities, some kind of negative consequence
that should be regulated is inevitable; while in Colombia the average is above 66.82% (See Table 3 and Graph 8).

**Table 3**  
Contingencies  
Negative consequences due to events and festivities.

<table>
<thead>
<tr>
<th></th>
<th>Tijuana</th>
<th>Mexicali</th>
<th>Tecate</th>
<th>Rosarito</th>
<th>Ensenada</th>
<th>Medellin</th>
<th>Bucaramanga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38.81%</td>
<td>62.69%</td>
<td>39.66%</td>
<td>48.39%</td>
<td>51.52%</td>
<td>56.00%</td>
<td>77.63%</td>
</tr>
<tr>
<td>No</td>
<td>61.2%</td>
<td>37.3%</td>
<td>60.3%</td>
<td>51.6%</td>
<td>48.5%</td>
<td>44.0%</td>
<td>22.4%</td>
</tr>
</tbody>
</table>

Source. Own elaboration based on the study of the sector

Based on the previous response, participants were asked the main negative consequences of the arrival of tourists, and four particularly worrying ones were identified: sex tourism, drug sales, increased crime and road traffic, among others; the percentage distribution of the sample is presented in Graph 8.

**Graph 8**  
Consequence of tourism

b. Increase in visitors

On the other hand, 73% of respondents in Baja California believe that the flow of visitors is properly organized versus 27% who need not. While the Colombian sample (63%) states that the tourist spill is 63% if established in advance. So, as part of the suggestions proposed by the participants of this study to compensate for the damage caused during the days when there is a greater flow of visitors and which in some way harms the social and environmental environment of its localities, it is predominant to design policies that promote the strengthening of public safety on average by up to 55%, followed by the application of sanctions and fines with an average of 17.8% (See Graph 9).
Likewise, from this angle you can achieve the measurement of the capacity that allows to size the agglomerated tourists in the scenarios of each city and with this establish greater promotion of the events and greater projection of attendees to these events applying the processes of attention of the visitors and the generation of contingency plans so as not to exceed the load capacity.

On the other hand, it was necessary to investigate the perception of the load limit by the study subjects with regard to the degree of occupation of the different spaces arranged by the authorities for the realization of cultural events and festivities by the participants. Below is a summary of the different types of Load Capacity studied and the overall rating given to it by respondents based on whether they have exceeded their attention limit (limit limit), are within the limit (or to the limit) or if they are below it (or the limit), as shown in Table 4.

The results indicate that, while the tourist load capacity in both countries exceeds most of its dimensions and that another large part is close or on the limit, which involves taking the necessary measures to avoid future and irreversible problems; this will be possible through adequate tourism management, involving both the government, the private sector and the community, in order to promote sustainable tourism.

Table 4
Summary of the perception of the load capacity limit

<table>
<thead>
<tr>
<th>Type of Capacity</th>
<th>Variables</th>
<th>Mexico Results</th>
<th>Colombia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C.C. Institutional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity limit in which the city council manages the services</td>
<td>Security</td>
<td>At the limit</td>
<td>&lt; limit</td>
</tr>
<tr>
<td></td>
<td>Transport</td>
<td>&gt; limit</td>
<td>&lt; limit</td>
</tr>
<tr>
<td></td>
<td>Bathrooms</td>
<td>&gt; limit</td>
<td>&gt; limit</td>
</tr>
<tr>
<td></td>
<td>Food stalls</td>
<td>&gt; limit</td>
<td>&lt; limit</td>
</tr>
<tr>
<td></td>
<td>Information services</td>
<td>&lt; limit</td>
<td>&gt; limit</td>
</tr>
<tr>
<td></td>
<td>C.C. Economic</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Benefits</td>
<td>At the limit</td>
<td>&lt; limit</td>
</tr>
<tr>
<td></td>
<td>Negatives</td>
<td>&gt; limit</td>
<td>At the limit</td>
</tr>
<tr>
<td></td>
<td>Positives</td>
<td>&gt; limit</td>
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</tr>
<tr>
<td></td>
<td>Increased employment</td>
<td>At the limit</td>
<td>&gt; limit</td>
</tr>
<tr>
<td></td>
<td>C.C. Urbanist</td>
<td></td>
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<td>Status of infrastructure usability:</td>
<td>Restaurants</td>
<td>&gt; limit</td>
<td>At the limit</td>
</tr>
<tr>
<td></td>
<td>Accommodation</td>
<td>&gt; limit</td>
<td>At the limit</td>
</tr>
<tr>
<td></td>
<td>Access roads</td>
<td>&gt; limit</td>
<td>&lt; limit</td>
</tr>
<tr>
<td>Type of Capacity</td>
<td>Variables</td>
<td>Mexico Results</td>
<td>Colombia</td>
</tr>
<tr>
<td>------------------</td>
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<tr>
<td></td>
<td>Parking lots</td>
<td>&lt; limit</td>
<td>&lt; limit</td>
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<tr>
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<td>Places of recreation and leisure</td>
<td>&gt; limit</td>
<td>At the limit</td>
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<tr>
<td>C.C. Ecological</td>
<td>Respect flora</td>
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<td>At the limit</td>
</tr>
<tr>
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<td>Wildlife respect</td>
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<td>At the limit</td>
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<tr>
<td>C.C. Psychological</td>
<td>Negative consequences</td>
<td>At the limit</td>
<td>At the limit</td>
</tr>
<tr>
<td></td>
<td>Increase in visitants</td>
<td>At the limit</td>
<td>At the limit</td>
</tr>
</tbody>
</table>

**Source.** Own elaboration based on the study of the sector

This analysis tool is usually applied for a particular place and time; however, this study shows in a general way the perception of the different entrepreneurs who participate as providers of some service during the cultural events and festivities of their places of origin.

### 4. Conclusions

The load capacity allows to know the volume that tourist companies can manage in a specific locality, thus allowing to establish the maximum points of provision of tourist services in the proposed dimensions (economic, ecological, urban, institutional and psychological) in the cities of the countries under study (Mexico and Colombia) and thereby incentivize the development of the region and tourism sustainability. That is why instruments such as load capacity support sustainable tourism by projecting an improvement in the income of entrepreneurs and the dissemination of the local culture seen from gastronomy, cultural, recreational and fair activities; however, he proposes entrepreneur from his point of view that the resources to advance these action plans must be assumed mostly by the state authorities, knowing that part of the solution is in themselves.

The evident tourist capacity allows the employer to identify the services he has provided in previous times and with them to project the adjustment to his sales (increase or decrease his services) and thus budget his income; this is accompanied by boosting its business towards tourism sustainability in which, entrepreneur and participant can best discuss the sites visited. Therefore, it is essential that governments create public policies that guarantee the exploitation and proper use of the natural resources used in tourism activity, since every day more environmental damage is generated that have an impact on the same man, since any negative action has a negative effect, causing irreversible deterioration in the environment and society.

The determination of the negative points that are perceived by visitors at events, can be a vital instrument for improving the provision of services throughout the tourism chain in order to attract new tourists with responsible use of environmental resources, through the effort between government entities, entrepreneurs and the general population. It is therefore necessary to significantly curb the production and consumption of both businesses and citizens, since the depletion of resources is being generated by the excessive use of them and the insatiable desire for economic power.

Tourism sustainability is an activity that requires the contribution of all the actors of society, but that must be oriented by the entrepreneurs themselves who are the most benefited in the conservation of tourist sites and the improvement of them. While it is true that economic growth generates social well-being in people, it is important that any economic action is aligned with the objectives of sustainable development, because in this way nature will be remunerated the damage caused year after year and man will be able to guarantee the survival of it, because nature itself responds to the inadequate treatment that has been given to it.

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The tourism sector is the same feeling in both nations, i.e. there is a need to incentivize and strengthen this sector because this will increase the country’s economic development, generate more jobs, increase the profitability of entrepreneurs; there is also the need to create good practices that go beyond a quality certification that accredits the good performance of SMEs, in the recognition and real contribution to the environment.

References


Ruiz, L. (2019). *Vanguard*. Obtained from March there were fewer informals in Bucaramanga: this due to the large number of informal establishments that have been reported at the close of March in Bucaramanga reaches 539,000 occupied registered by the National Administrative Department of Statistics (Dane), at least 54.4%


State System of Civil Protection Baja California. (s.f.). *Comprehensive System of Registration of Risk Activities in Open Areas of Baja California*. Dropped from http://www.proteccioncivilbc.gob.mx/Agrestes/Introducion.html


The Republic. (2019). www.larepublica.co. (J. Lorduy, Editor) Recovered on 04 March 2020, from Arribo of foreigners to Colombia increased 2.9% in the first half of the year: https://www.larepublica.co/economia/arribo-de-extranjeros-a-colombia-aumento-29-en-el-primer-semestre-del-ano-2917412