WHAT IS CARRYING CAPACITY?

Carrying capacity (CC) provides valuable information about a destination which may be used to inform decisions in relation to the sustainable development of a destination. As a tool, it can be applied to the tourism activity planning process, particularly in the case of sensitive destinations such as those bordering the Meso American Reef. It also allows destination managers to better manage their visitors, both on a destination level as well as by better managing the tourist attractions their visitors enjoy.

WHY IS CALCULATING CARRYING CAPACITY NECESSARY?

The results from the sustainability assessments recently undertaken at the three MAR destinations, based on GSTC criteria, reveal that it is vital for all three members of the Network to define this parameter and to apply it accordingly to their own destinations.

The concept of CC continues to be used to design public policy. It helps to enhance the visitor experience whilst encouraging greater sustainability with regard to the use of natural and cultural resources and, at the same time, balancing the use of resources with social and economic development. CC may be associated with the concept of Limit of Acceptable Change (LAC), applied at the three destinations. LAC is used to determine the intensity of the use of natural resources over a given area, resulting in a tolerable level of change with regard to conservation objectives and the use and enjoyment of the area. Both of these tools are useful in the development of strategies to define visitor management systems.

 context

Tourism is the principal economic activity in the MAR region generating a regional income of over US$667.5 billion in 2018 (BREA-FCCA 2018). For Honduras tourism represents 6% of its gross domestic product (GDP), for Mexico 8.6%, and a sizable 38% of GDP for Belize.

The proximity of the MAR destinations to the United States, together with the region’s mild winter climate, have been important factors for the growth of the cruise industry in the region. Although the principal source of cruise passengers to the Caribbean is from the United States (76%), the region is highly attractive to cruise passengers from all around the world. It is important to highlight that the cruise tourism sector shows considerable potential for growth.

HOW IS CARRYING CAPACITY MEASURED?

In the absence of any legal guidelines, the scientific literature provides options for CC. The most accepted calculation method is that of Miguel Cifuentes, published in 1992. This has been the most widely applied method, given it takes into consideration a wide range of factors and indicators.

The CC calculation is based on a complex process whereby a series of ecological, physical, social, economic and cultural indicators are taken into account. That said, although the theory is sound, the difficult part is figuring out exactly which indicators to use in order to calculate the maximum and optimum CC for a given destination. Thus, indicators need to be duly defined for each individual tourist destination.

As such, it is important to realize that the information obtained from CC calculations will be considered as a point of reference, to be used in conjunction with other data. This is due to the fact that each destination has varying visitor management capabilities.
**BENEFITS**

Understanding the CC of a tourist destination in relation to its tourist activities, accommodation, transport, waste management capabilities, etc. will no doubt translate into a better travel experience for visitors. Based on this calculation, destination managers will be able to create destination management systems helping their location to remain viable, diversified and current as an attractive tourism destination.

The tourism industry, as well as local residents, will both benefit from the knowledge of how many visitors the destination can adequately accommodate without compromising the natural and cultural assets. This way, visitors, i.e. the cruise passengers, will benefit from a more enjoyable travel experience when visiting the Network partners’ destinations.

**CURRENT SITUATION: BELIZE**

Network destination partners differ from each other in a number of ways: Belize is a country, Roatan an island with two municipalities and Cozumel is a single island-municipality. This explains why each has a different level of governance, diverse budgets and why each has made a different amount of progress along the path towards destination management.

Tourism is such an important activity that it represents 38% of Belize’s GDP. Since 2012 the sector has been guided by the “National Sustainable Tourism Master Plan for Belize”, developed as part of a sustainable tourism program. The Master Plan is aligned with the United Nations’ 2030 Sustainable Development Goals. In 2017, the Belize National Tourism Policy was updated, highlighting sustainable tourism as a priority focus, calling for further advances in visitor management, waste management, cultural and natural resource management, etc.

One of the Plan’s main objectives is the development of port activities in relation to cruise arrivals, which stands out as one of the plan’s priority outcomes. To this end, staff in Belize started working on a CC study last June, focusing on the port facilities at Fort Street Tourism Village and Harvest Key.

From this study they expect to gather baseline data which will enable informed decisions to be made with regard to visitor management, attraction management and product diversification. The CC study will be focused on the controlled expansion of cruise tourism for Belize City, in line with the Master Plan, and also towards the definition of minimum requirements that attractions shall cover to fulfill visitor experiences and to avoid bottlenecks on visitor flows.

**LEGAL FRAMEWORK**

For Belize, cruise tourism is governed by the Master Plan and the National Tourism Policy of Belize. However, it is legislated and regulated under specific Port Development Legislation, Cruise Tourism Tax Legislation, and also Regulations under the Hotel and Tourist Accommodation Act (HTAA) of Belize. Port development and management is organized via concession agreements with port principals. Furthermore, the Belize Tourism Board (BTB) Act regulates the operations of tour guides and tour operators that service the cruise industry.

Under the HTAA, the BTB is tasked with providing oversight of cruise tourism in Belize, including the registration and scheduling of cruise ship calls annually.

**COURSE OF ACTION**

The MAR Network’s final goals are about building visitor satisfaction rates, visitor safety and improving efficiencies in travel to our destinations. As a first component of a program to improve and strengthen visitor management, it is vital that CC studies are undertaken within the destinations and at the attraction level, considering local residents’ satisfaction as well. This phase shall consider discussion with cruise lines to guarantee that industry trends are taken into account.

Based on this, the Network hereby proposes that, as a first step, each of the three destinations proceed to undertake their own CC studies. Each should define its scope based its particular environmental and political conditions. The proposed time frame for these studies to be completed is between October 2019 and February 2020.

Belize has deemed it necessary to calculate the CC of its two ports independently. The process was initiated this year by first defining the appropriate terms of reference.
The study is focused on establishing the daily CC of each port, considering such factors as port berths, tenders and buses available as well as tour activities conducted at each attraction. This will facilitate the identification of gaps, bottlenecks and recommendations. The study will also consider environmental, social and economic parameters in order to achieve optimum CCs, whilst at the same time improving visitor experience at port facilities and their related areas of impact.

Belize aims to calculate the optimum, maximum and minimum visitor capacity for each port facility annually in order to provide guidelines for the scheduling of vessels as well as for the future expansion of cruise tourism in Belize. This is based on the recommendations provided by the updated National Tourism Policy. The results from the CC study for Belize will complement the recommendations of the Tourism Policy, as well as help in future negotiations with port managers to provide more optimized controls at destinations. The results from the CC study will also serve as a baseline for future work Belize intends to do at the attraction level. This will serve to enhance the tourism product within attractions, e.g. archaeological sites, marine protected areas, etc., As well as in the development of a comprehensive visitor management program at priority attractions in Belize such as Nohoch Che’an archaeological site, Altun Ha, etc.

In the medium term Belize intends to use visitor management planning to improve capacity and visitor satisfaction.

The Network recommends carrying out and updating the CC studies at each destination as a first step towards developing and implementing visitor management programs. These will serve to improve the visitor experience and, at the same time, will help each destination to develop its own set of sustainable tourism strategies. This will help each location remain viable and attractive as a cruise destination whilst supporting the health of the Meso American Reef.

We recommend taking into account the experience and knowledge of local, regional and international stakeholders where such stakeholders’ interests bear relation to the terms of reference of the study. The aim is to achieve more uniform results and for the Network to go on to propose a regional ethical code of practice for the Meso American Reef region, serving as a standard for cruise line visitor management in the future.

As such, we recommend that the terms of reference for the CC studies include a range of topics, including those relating to the physical aspects of vessel and visitor management, fresh water management, waste management, transport and logistics, number and size of beaches, as other critical areas identified in the respective GSTC assessments, as recommended in the Cifuentes methodology.

Therefore, a Road Map for all three destinations should lead to developing a standardized Visitor Management Program in the MAR region. This should include guidelines and best practices for visitor management activities at the attraction level and have the following objectives: improve visitor experience, improve visitor safety, improve visitation efficiency, and empower responsible visitor behavior to safeguard future economic viability of destinations and their attractions.

Belize wishes to:
1. Determine the optimum, maximum and minimum visitor capacity for each port facility (Fort Street Tourism Village in Belize City, & Harvest Key) annually, in order to provide guidelines for scheduling of vessels and future expansion of Cruise Tourism in Belize (underway).

2. In the medium term, use visitor management planning to improve capacity and visitor satisfaction, including the following components: a visitor satisfaction study, assessment of the consumptive patterns, value for money-willingness to spend, improvement of visitor flows, energy management, waste production and management (solid and liquid) for the following priority attractions: Jaguar Paw, Altun Ha, Belize City District, Hol Chan and Goff’s Cay. Budget: $20,000 per attraction. $100,000 in total for this phase.
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