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Illes Balears**

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Overtourism, impacts and policies. Asian perspectives: the case of Boracay.

Laura Vicens Ballester

Grau de Turisme

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DNI de l'alumne: 43214245M

Treball tutelat per Javier Rey-Maqueira
Departament de Economia Aplicada

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Abstract

Through an understanding of what overtourism is and the theories used to analyze this phenomenon, this paper examines the evolution of overtourism in Asia and explains the key factors that have contributed to the uncontrolled increase of arrivals to the continent. The development of tourism on the island of Boracay is explained in order to better understand the main factors that contributed to overtourism on the island. Furthermore, the measures the government took to control the situation and prevent it from arising again are analysed and explained. Lastly, policy recommendations and possible solutions to deal with overtourism are given, as well as the actions that Boracay took to curb this phenomenon are discussed.

1. Introduction and contextualisation

1.1. Choice of topic

My reason for choosing this topic is its relevance nowadays, and the fact that it interests me greatly. More and more newspapers, media, academia and governments are discussing and analysing this phenomenon. Personally, I believe that in one way or another, we are all responsible for the congestion that many tourist destinations are experiencing, and, in the same way, it is our responsibility to be aware of the consequences that the constant flow of tourists around the world is causing. More importance should be given to this issue since we are, along with the actions of the government and stakeholders, the only ones who can curb overtourism.

1.2. Objectives

The main objectives of this thesis are:

- I. Understand the concept of overtourism and its various measurement methodologies.
- II. Analyse the evolution of tourism in Asia to understand how some destinations have ended up coping with overtourism.
- III. Identify the main factors that have contributed to overtourism in Asia
- IV. Study and analyse the tourist evolution of Boracay, how overtourism ended up affecting the island, what measures had to be taken and the current situation of Boracay today.
- V. Compilation of recommendations and possible solutions to curb overtourism.

1.3. Methodology

To carry out this study and achieve the objectives mentioned in the previous section, a review of the literature related to this topic was carried out, combined with an analysis of the qualitative and quantitative methodology. The process consisted of sourcing, understanding, selecting and finally synthesizing the information from the papers. The documents obtained to carry out the thesis were researchers' papers, articles from digital newspapers, blogs, books, data

sources and organizational and institutional reports. These documents were obtained through the resources provided by the Faculty of Tourism of the UIB, academic web search engines such as Google Scholar or Mendeley, social networks like ResearchGate and data sources including World Travel & Tourism Council (WTTC) or World Development Indicators.

1.4. Outline

First, this paper reviews the literature surrounding what overtourism actually is, and how the concept emerged. Then, four renowned models are explained which, although they never explicitly refer to overtourism, help to understand the impacts of tourism and the risks of congestion in destinations.

Next, this dissertation shall focus on the evolution of tourism in Asia and how the constant increase in the number of tourists has meant that, today, some destinations are suffering from overtourism. Then, for a better understanding, the different factors that have contributed to this phenomenon in Asia are examined in detail.

The following section explains the evolution of tourism in the island of Boracay and, through data collection from news and scientific studies, the causes that contributed to overtourism, the consequences suffered and, finally, an analysis of the measures that the government took to face this devastating situation.

Lastly, policies recommendations to mitigate this phenomenon are proposed and the measures taken by Boracay to curb overtourism are detailed.

2. Overtourism: around the definition

In recent years the term "overtourism" has been gaining popularity in different areas, including academia, government policy, media and social networks. In August 2016, the founder of Skift, worried about the alarming negative impact of mass tourism, made the first attempt to coin the concept "overtourism" in a foreword to an article concerning the impact of tourism in Iceland (Dickinson, 2018).

Overtourism represents a potential hazard to popular destinations worldwide, as the dynamic forces that power tourism often inflict unavoidable negative consequences if not managed well. In some countries, this can lead to a decline in tourism as a sustainable framework is never put into place for coping with the economic, environmental, and sociocultural effects of tourism. The impact on local residents cannot be understated either.

The UNWTO (2018) defines this phenomenon as “the impact of tourism on a destination, or parts thereof, that excessively influences perceived quality of life of citizens and/or quality of visitors experiences in a negative way”. While Koens et al. (2018) describe it as “an excessive negative impact of tourism on the host communities and/or natural environment”.

Despite there being numerous definitions, the concept of overtourism is still a bit blurred since it is in its early stages of being shaped and, therefore, lacks clarity (Capocchi et al., 2019).

As previously mentioned, it is a relatively new concept that has come into use in the last three years, although scientists have been writing about the increase in tourism for over 40 years and some destinations have been struggling with it for decades. The first papers in which authors discussed the consequences of excessive concentrations of tourists in certain places date back to 1960 (Capocchi et al., 2019). During 1970, the necessary indicators to monitor and manage the optimal size of the tourist flow in various regions began to be defined and developed (Kruczek, 2019). Furthermore, in order to clearly understand the impact of tourism, both quantitative and qualitative indicators must be taken into account (UNWTO, 2018).

The literature highlights four internationally-recognized models that remain a significant reference in academic studies for understanding the impact of tourism on local communities and the risks of destination saturation, which will be explained in further detail in the following sections. These are: Doxey 'Irritation Index', Life Cycle of the Tourist Area, Carrying Capacity and Limits of Acceptable Change. These publications have never explicitly referred to overtourism, yet they do evidence the damaging effects of the excessive increase in the number of arrivals.

As in any other discussion regarding overtourism, the issue of resident dissatisfaction arises. In 2016, this led to the alternative Spanish term "Turismofobia" which refers to a mixture of rejection, contempt and distrust towards tourists (Milano, 2018). While measuring length of stay, volume of tourists, type of tourism and number of visitors is relatively easy, assessing the social impact of the constant influx of visitors is slightly more challenging. Residents' tolerance is a truly complex and subjective parameter. In this case, the acceptance level of the host community varies depending on local and private interests (Kruczek, 2019).

As we have already mentioned, the frequent discussions about overtourism are far from new. Benner's recent publication "From Overtourism to Sustainability: A research agenda for qualitative tourism development in the Adriatic" says that what is new here is the level of awareness of the possible effects that the constant growth in tourism can cause. According to Benner, the main implications are:

1. Rising costs of living and housing and real-estate speculation that might eventually bring about gentrification, congestion of transport infrastructure;
2. Deterioration of local residents' identification with place;
3. The loss of a destination's authentic character, substantial harm to cultural or environmental heritage, or a privatization of spaces that are supposed to be publicly accessible, and hence segregation (Benner, 2019).

The CEO of Responsible Travel in UK, Justin Francis, argues that in order to prevent the negative impacts that overtourism can cause, the importance of regulation and government leadership is crucial (Minihane, 2019).

The concept of overtourism is applicable to cities, islands, national parks, reserves, mountains and polar regions. This phenomenon has already been studied in many European cities such as Venice or Barcelona (Kruczek, 2019), and in other destinations, such as the tropical island of Boracay in the Philippines, the government has already had to adopt a number of regulations to combat this issue (Varga and Terrier, n.d.).

2.1. Doxey 'Irritation Index'

The Irridex Model explains the main causes of the anti-tourist sentiment of the local community as a result of mass tourism. The significant increase in tourist activity was always a topic of great interest for Doxey, who analyzed how overdevelopment and over-visitation affect the behavior of locals and visitors (Dodds & Butler, 2019). The Irridex Model describes across four stages (see Figure 1) the different emotional states that residents go through, due to the steady rise in tourist arrivals (Pile, 2018) and the social, environmental and economic impacts of that increase.

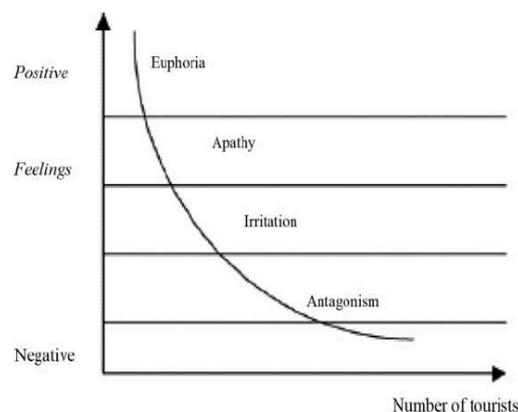


Figure 1. Doxey 'Irritation Index'. Source: Babu and Munjal, 2015.

When the region barely has any touristic activity, tourists are very welcome as the residents are curious. During this stage, called *Euphoria*, the contact with tourists is informal. As the number of tourists increases, the relationship between the local community and visitors becomes more formal. Therefore, at this stage of *Apathy*, visitors are seen as a simple source of income. During the *Irritation* stage, the number of tourists reaches the utmost level and, consequently, the development of tourism achieves the saturation stage. At this point, the host community does not see any economic gain from hosting tourists. The scenario worsens when tourists are blamed for wrongdoings in the community and are seen as lacking human values. Residents perceive tourists as the main cause of the problem and express their irritation and annoyance both verbally and physically. This last stage is known as *Antagonism* (Babu and Munjal, 2015; Reisinger, 2012).



Figure 2. Quote against mass tourism in the Park Güell, Barcelona. Source: Global Times

Even though the model provides a clear vision of how residents' perceptions of tourism change over time, several authors have criticized the Irridex Model for being simplistic, as the perception and attitude of the host community can vary greatly (Essays, 2018; Pile, 2018).

2.2. Tourism Area Life Cycle

In 1980, Professor Richard W. Butler presented the model known as Tourism Area Life Cycle (TALC) whereby a discussion about tourism carrying capacity and sustainability begins. Butler's model is one of the most frequently cited in tourism articles when it comes to the development of tourist destinations.

Butler noticed that tourist attractions must be carefully managed and the capacity limits not be exceeded as destinations are fragile and ever-changing. Therefore, from the analysis presented by Levitt in 1965 concerning the maturity stage of products, Butler postulates that a tourist destination or resort goes through six phases during its development process, just as a product does (Spencer, 2019; Dodds & Butler, 2019).

In Butler's article (1980), he explains in his own words the concept of a touristic area cycle of evolution:

Visitors will come to an area in small numbers initially, restricted by lack of access, facilities, and local knowledge. As facilities are provided and awareness grows, visitor numbers will increase. With marketing, information dissemination, and further facility provision, the area's popularity will grow rapidly. Eventually, however, the rate of increase in visitor numbers will decline as levels of carrying capacity are reached. These may be identified in terms of environmental factors (e.g. land scarcity, water quality, air quality), of physical plant (e.g. transportation, accommodation, other services), or of social factors (e.g. crowding, resentment by the local population). As the attractiveness of the area declines relative to other areas, because of overuse and the impacts of visitors, the actual number of visitors may also eventually decline.

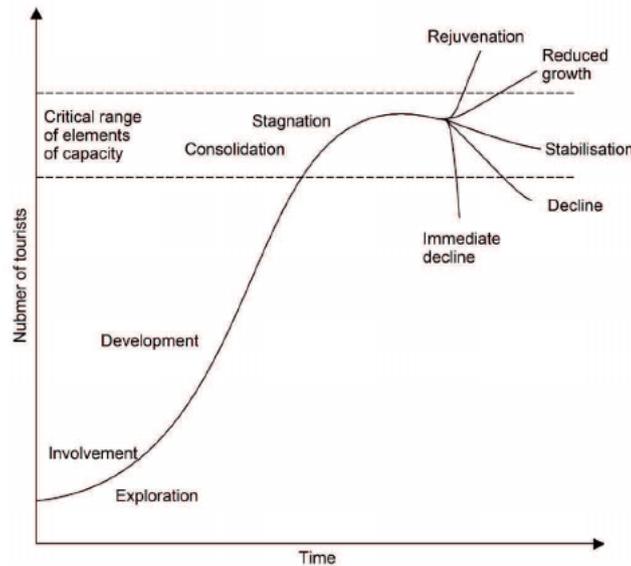


Figure 3. Model of a Tourism Area Life Cycle. Source: Butler, 1980

For Butler the majority of tourist destinations go through this cycle or a similar one, although with different variables such as time and number of visitors, which may vary depending on the specific characteristics of each destination.

The author states that, for optimal growth, it is especially important to manage and control the key resources of each destination so that residents' quality of life, the environment or the authenticity of the destination for visitors are not affected. By contrast, if tourism development is not taken seriously and, therefore, is not meticulously controlled, the destination loses most or part of its distinctive characteristics and, thus, this scenario leads us to what is currently known as overtourism. While the TALC model has been widely used and frequently cited in the literature, it has also been repeatedly criticized. Several authors opposed this model due to its lack of operability, its unidirectional approach, which is not entirely appropriate, or because of its lack of adjustment to reality in some parts of the cycle (Dodds & Butler, 2019).

2.3. Carrying capacity

Another key concept that must be taken into account in the debate about overtourism is "carrying capacity". In response to the constant concerns about the impacts of the tourism industry in 1980, the term carrying capacity emerged as "one of the earliest attempts to define the limits of tourism growth" (Kennell, 2014).

There have been several attempts to define the concept of carrying capacity in the tourism industry. In 1981, the UNWTO defined carrying capacity as "the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic and sociocultural environment and an unacceptable decrease in the quality of visitors' satisfaction" (UNWTO, 2018) whereas Mathieson and Wall (1982) describe it as "the maximum number of people who can use a site without an unacceptable

alteration in the physical environment and without an unacceptable decline in the quality of experience gained by visitors”.

By these definitions, we understand that, if human activity exceeds the carrying capacity of a destination, it would cause negative impacts on the society, economy and culture of a region and would, consequently reduce the satisfaction of the visitor.

Gretz, O’Reilly and Romeril were particularly interested in linking the analysis of carrying capacity to the tourism planning process (Batta, 2000). Since it is a very complex concept, carrying capacity is split into three main dimensions:

- Physical carrying capacity: “the maximum use of the resource that can take place by tourists, before the resource begins to be unacceptably degraded” (Kennell, 2014).
- Social carrying capacity: “the level of tolerance of the host population for the presence and behaviour of tourists in the destination area” (Maggi and Fredella, 2010).
- Economic carrying capacity: “the ability to absorb tourism activities without displacing or disrupting desirable local activities” (Batta, 2000).

In practice, the dimensions explained are mixed with others to analyze the impacts that tourism has on a region or destination (Figure 4): natural-ecological, socio-demographic and economic-political.

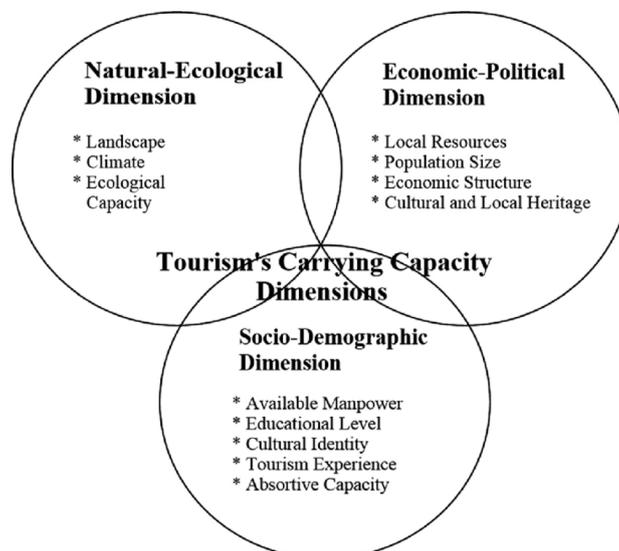


Figure 4. Tourism carrying capacity dimensions. Source: Sati, 2018

The natural-ecological dimension comprises all fixed and flexible elements of the natural environment (the ecological and natural heritage capacity, length of the coastline, climate etc.), as well as the infrastructural system (water supply, sewerage, electricity, gas, social amenities, transportation, public services, etc). The socio-demographic, on the other hand, refers to all the factors that are affecting the social community, as well as the relationship between residents and tourists. Lastly, the economic-political dimension refers to all the financial

and investment measures that have been planned for proper tourism development (PAP/RAC, 1997).

In fact, the relevance of these parameters differs as every destination is unique and has its own characteristics, type of tourism and life-cycle (Maggi and Fredella, 2010). There is no method of measuring carrying capacity that can be used uniformly and equally, as both destinations and tourist attractions are not homogeneous and stable and, therefore, cannot be considered constant (Kennell, 2014; Milano, 2017). Hence, to measure the tourism carrying capacity, we have to consider the specific features of each destination.

Whereas tourism carrying capacity can be useful to measure the pressure that tourism has on a destination (Milano, 2017), this model has been strongly criticized due to its ambiguity and limitations.

2.4. Limits of Acceptable Change

As a need to measure tourism growth and its implications, alternative methodologies to the carrying capacity model emerged (Kennell, 2014). The Limits of Acceptable Change (LAC) is generally the most useful method when managing and avoiding overtourism in natural-based destinations, especially in protected areas (RTP, n.d.; McCool, 2013).

The model considers that changes are inevitable and a natural consequence of human use (Stankey et al., 1985). Thus, it does not try to stop change, but rather tries to identify how much change an area can tolerate and how much is acceptable, and then what strategy should be adopted to prevent any unacceptable impact (McKay, 2006; Komsary et al., 2018). Therefore, this methodology reframes the question about carrying capacity from “How many is too many?” to “What are the appropriate/acceptable conditions or How much change is acceptable?” (Stankey et al., 1985; McCool, 2013).

The LAC involves a process of nine steps which are used to evaluate and assess the changes on a given region (Stankey et al., 1985; Komsary et al., 2018; RTP, n.d.).

- 1. Identify area concerns and issues:** Citizens and managers identify values, problems and concerns attributed to the area that require attention and intervention; a useful step for managers, as it provides a general understanding of the area.
- 2. Define and describe opportunity classes:** Identification of various types of opportunity zones. An opportunity zone provides “a qualitative description of the kinds of resource and social conditions acceptable for that class and the type of management activity considered appropriate” (Stankey et al., 1985).
- 3. Select indicators of resource and social conditions:** Identify measurable (quantitatively) indicators that show where and when management action might be needed.

4. **Inventory resource and social conditions:** Collect data to create an inventory of resource and social conditions. The inventory provides information about the conditions of the indicators in the area.
5. **Specify standards for resource and social indicators:** Specification of standards that describe the conditions that are considered acceptable and appropriate for each opportunity class.
6. **Identify alternative opportunity class allocations:** Consider different options to decide what social and resource conditions are acceptable.
7. **Identify management actions for each alternative:** Examine the different management strategies needed to achieve the conditions required in each type of alternative opportunity. A different allocation requires different management. In this way, we will be able to know which ones are viable and also, we would identify where there are problems and the appropriate management measures.
8. **Evaluate and select an alternative:** Final allocation of opportunity classes and selection of the preferred management program. In this step we have to analyze the costs and benefits of each alternative, considering environmental impacts, impact on visitors and administrative expenses.
9. **Implement actions and monitor conditions:** The preferred option is applied and supervised by a monitoring program that assesses its effectiveness.

3. The Rise of Overtourism in Asia

Tourism is an established economic activity in Asia that dates back to the early 19th and 20th centuries. Even though the continent suffered numerous crises over the years which impacted directly on tourism and slowed its growth, the tourism industry has become one of the main sources of income for the continent's economy (Hitchcock, et al., 2008).

As seen in Figure 5, from 2010 until now, the tourism industry in Asia has been booming, as the arrivals have increased consistently year after year. In the latest UNWTO/GTERC report, Asia is described as "a hotbed of tourism growth". The steady increase has enabled Asia to maintain its position as the world's fastest growing tourism region. While Europe remains the leading destination, with a total of 670 million visits in 2018, Asia & The Pacific were the second most visited continent, with a record of 348 million arrivals, representing one-fourth of the world's total international arrivals and a growth of 7% compared to the previous year. In just under two decades, the share of international tourist arrivals went up from 16% in 2000 to 25% of the world total in 2018 (UNWTO/GTERC, 2019).

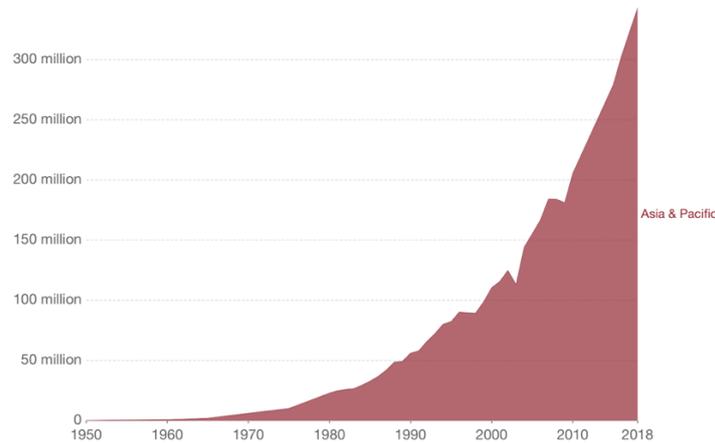


Figure 5. Number of international arrivals in Asia & Pacific. Source: Our World Data

A distinctive feature of the continent is that the majority of tourism is intraregional, making up 79% of the total, while 21% is interregional (11% comes mostly from Europe, 6% from the Americas and the other 4% is not specified) (UNWTO/GTERC, 2019). Chinese travellers are the largest contributor to tourist arrivals in Asia since 2012 and are also the largest source market for most destinations on the continent. Korea, Taiwan, U.S and Japan are the other main source markets (Horwath HTL, 2018).

China, Thailand, Japan and Hong Kong are the most visited countries in Asia. However, countries such as Cambodia, Laos or Myanmar have seen the greatest growth in terms of tourist arrivals. Hence, if the number of arrivals to Asian destinations continues to increase, as it has in recent years, it is estimated that by 2022, Asia will have the highest volume of international visitor arrivals, surpassing Europe (Xu, 2019).

Rank in:		Country	Series	Million			Change (%)	
Region	World			2016	2017	2018*	17/16	18*/17
1	4	China	TF	59	61	63	2.5	3.6
2	9	Thailand	TF	33	35	38	9.1	7.9
3	11	Japan	VF	24	29	31	19.4	8.7
4	14	Hong Kong (China)	TF	27	28	29	5.0	4.9
5	15	Malaysia	TF	27	26	26	-3.0	-0.4
6	21	Macao (China)	TF	16	17	18	9.9	7.2
7	22	India	TF	15	16	17	6.7	12.1
8	26	Viet Nam	VF	10	13	15	29.1	19.9
9	27	Republic of Korea	VF	17	13	15	-22.7	15.1
10	29	Singapore	TF	13	14	15	7.7	5.5

Table 1. Top ten tourism destinations in Asia – International tourist arrivals. Source: UNWTO, 2019

The Asian continent could be divided into three main subregions known as: North-East Asia, South-East Asia, South Asia. The tourism's evolution in each of them has been slightly different, for this reason it will be explained separately.

North-East Asia: Internationally-known for its ancient culture, traditions and heritage, this subregion acts as the engine of T&T of the continent. In terms of competitiveness, it is the most competitive subregion and the second most competitive in the world (WEF, 2019). It is not surprising, then, that North-East Asia has historically been the highest performing region in terms of number of arrivals, receiving the record-breaking figure of 169.2 million visitors in 2018, which represents nearly half of the total international arrivals in Asia (UNWTO/GTERC, 2019), an amount clearly exceeding the 159.5 millions visits recorded in the previous year (UNWTO/GTERC, 2018).

China is the largest T&T economy on the continent, representing more than half of the subregion's GDP with around 13.41 trillion U.S. dollars (WEF, 2019; Textor, 2020). The country is also the world's largest outbound tourism market, leading the world in domestic tourism, with 4.44 billion trips recorded in 2016. The improvements in transportation with high-speed railways, flights and other traffic systems, along with innovative and improved travel products, have further increased the number of Chinese tourists taking domestic trips in 2017 (Horwath HTL, 2018). China has the highest number of international arrivals in the subregion, as well as the whole continent, with 63 million and this is followed by Japan with a total of 31 million (UNWTO/GTERC, 2019). In North-East Asia, the countries stand out for having strong health and safety conditions, the world's best air, ground, port and ICT infrastructures to accommodate large numbers of visitors. Nevertheless, the subregion is rather expensive, dissuading many tourists (WEF, 2019).

Unfortunately, unmanaged increase of tourist's arrivals has affected some destinations in this subregion, and countries such as Japan are experiencing the consequences of overtourism in the most demanded tourist attractions (Florida, 2018). For instance, in the case of the Japanese city of Kyoto, overtourism has affected the city to such an extent that even some media calls this phenomenon "kanko kogai", which means "tourism pollution" (Smith, 2019).

Even in the most prepared destinations with adequate infrastructure to accommodate large masses of tourists, if the flow of visitors is not properly regulated and managed, the destination could become a victim of its own success.

South-East Asia: Year after year, thousands of tourists are attracted to this subregion for its impressive combination of religion, tradition and history, as well as its paradisiacal sandy beaches and price competitiveness. ASEAN (Association of South East Asian Nations) depends on T&T more than any other subregion in the continent (WEF, 2019). As seen in the graph, the influx of visitors has been increasing steadily over the year, which is why it is not surprising that South-East Asia was the second fastest-growing subregion in the world, with 8% average annual growth. In 2018, ASEAN exceeded the subregion's average arrivals growth, welcoming 135,3 million visitors (37% of the continent total arrivals), overcoming by far the 125,7 million arrivals of the previous year (UNWTO/GTERC, 2019).

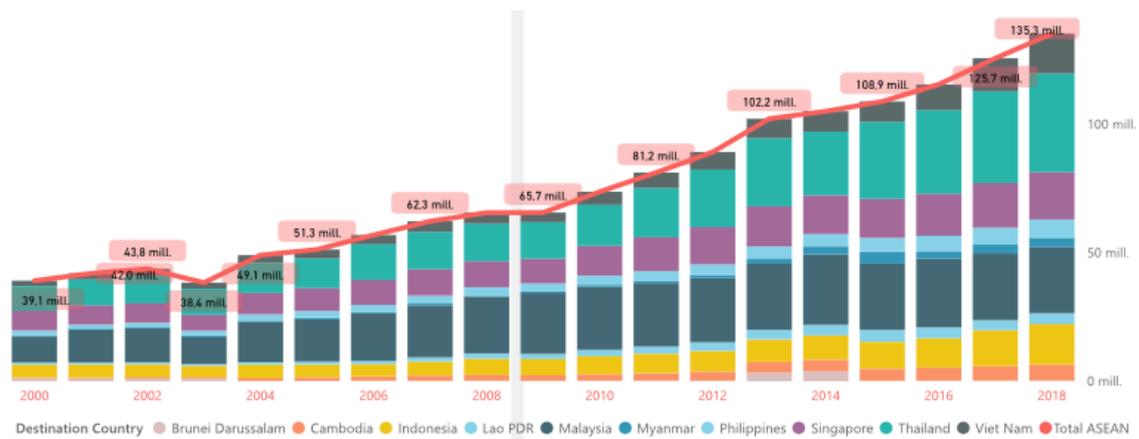


Figure 6. Total visits to ASEAN from 2000 to 2018. Source: ASEANStats, 2018

On the other hand, in 2018 an exponential increase over previous years in terms of GDP was estimated, amounted to approximately 2.95 trillion U.S. dollars. ASEAN's GDP has skyrocketed for a few years now, reflecting the economic prosperity of the subregion (Plecher, 2019).

Nation	2010 GDP (US\$billion)	2018 GDP (US\$billion)
Brunei	13.71	13.57
Cambodia	11.23	24.44
Indonesia	755.26	1,022.45
Laos	7.5	18.12
Malaysia	258.65	358.58
Myanmar	39.78	68.67
Philippines	199.59	330.91
Singapore	239.81	364.14
Thailand	341.11	504.93
Vietnam	112.77	241.27

Table 2. GDP (US\$billion) of the ASEAN countries in 2010 and 2018. Source: Statista

Furthermore, as shown in the bar chart below, in 2018 Thailand recorded the highest amount of arrivals among the ASEAN countries, with 38 million, and was the second most visited country in Asia. This was followed by Malaysia and Singapore, with 25.8 and 18.3 million visitors respectively (ASEANStats, 2018). Bangkok remains the most visited city in Asia and the top destination for global travelers, welcoming around 22.7 million international visitors. It should be noted that the Thai capital has been the most visited city in the world in the last four years. Singapore, with 14.67 million arrivals, is also edging towards the top most visited cities in the world (Talty, 2019). Besides that, China, Singapore and Korea are the origin countries that visit South-East Asian destinations the most (ASEANStats, 2018).

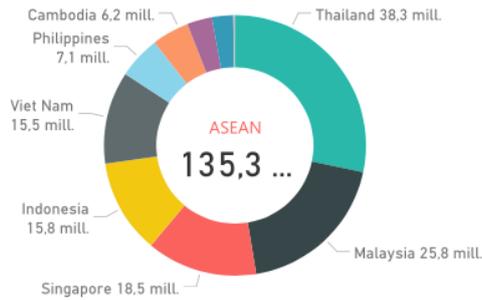


Figure 7. ASEAN most visited counties in 2018. Source: ASEANStats, 2018

According to GlobalData’s latest report, every country has a huge potential to keep growing in the following years in this subregion. The report estimated that in 2022, the ASEAN countries will receive 155.4 million international visitors. Although the constant flow of travelers fuels the economy of Southeast Asia, overtourism is becoming an issue of concern in this subregion, so both government and travel agencies need to take this phenomenon more seriously and act immediately to avoid catastrophic consequences. Laura Beaton, T&T analyst at GlobalData claimed that “as the number of visitors increase, they need to be distributed more effectively across the region’s countries to avoid degradation to the most popular tourist areas. There are already positive moves towards this in some countries and less popular areas should be able to capitalize on this”. The indefinite closure of Maya Bay in Thailand is a prime example of the issues that the destination faced because of overtourism (Salikha, 2019). Furthermore, another example of overtourism in this subregion is the temporary closure of Boracay that will be explained in section 4.

South Asia: The countries in this subregion are known for their deep cultural roots, magical nature and ancient history. While they share some similarities, each country is unique and has something different to offer. Figure 8 shows that over the years, the tourism activity in this subregion has increased considerably. In fact, in 2014 the flow of tourists was booming, raising the number of international arrivals from 11.68 million in 2013 to 18.91 million in 2014. The emergence of new destinations in this subregion and the increasing number of visitors year after year, made Southern Asia the fastest growing subregion in 2017, which was led by the outstanding performance of India (Horwath HTL, 2018; World Development Indicators, 2019). In 2018, the number of tourists coming to this subregion was even higher, peaking and welcoming 26.7 million visitors, representing 9% of total arrivals on the Asian continent (UNWTO/GTERC, 2019). The price competitiveness, the natural and cultural resources and new visa facilitations are the subregion’s strongest points. However, its greatest disadvantage is its lack of proper tourist service infrastructure, as well as low health and safety standards (Horwath HTL, 2018; WEF, 2019).

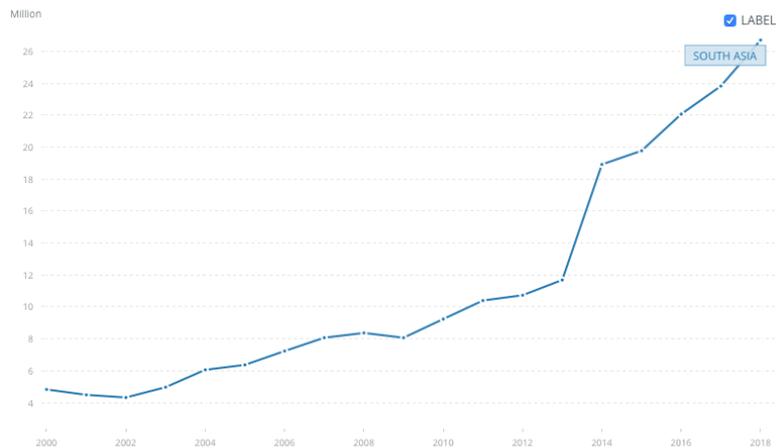


Figure 8. Number of international arrivals in South Asia from 2000 to 2018
Source: World Development Indicators

India is the most competitive country in the subregion in terms of T&T economy (WEF, 2019), and the most visited with a total of 17.42 million arrivals in 2018 (World Development Indicators, 2019). Even though the country has greatly improved the air, ground and port infrastructure, it still needs to enhance other aspects such as an enabling environment, tourist service infrastructure and, above all, environmental sustainability (WEF, 2019).

Considering that South Asia spans an area of 5,134,641 km² and has a population of about 1.934 billion people (Worldometer, 2020), at first glance the 26.7 million international tourists received in 2018 does not seem an alarming figure, but in fact it is. The problem here is that the crowds of tourists are concentrated in the most touristic and “must-see” sites and, sadly, there are already several places that are facing overtourism. For instance, in India several National Parks, the namely Taj Mahal, which receives over 50,000 visitors per day (foreigners and domestic tourists) and the endless beaches of Goa are some examples of places that are suffering the negative effects of overtourism (Agarwal, n.d.).

What is clear here is that there are more tourists now in Asia than ever before. For years, governments have focused on merely promoting tourist destinations and increasing the number of arrivals, which has led to an uncontrolled growth of the tourists’ arrivals. The unbridled growth, together with the lack of long-term planning and development in many destinations, has led to a number of tourist spots in Asia facing the negative effects of unregulated tourism (Liang-Pholsena, 2018). The CEO of Global Sustainable Tourism Council, Randy Durband said:

I think governments were asleep, they didn’t see it coming. Governments typically put money into just promotion, anything into development were just small. Suddenly there’s an awareness as it hits them in the face as they realize they need to put resources into planning. And because they are all so late into the game, we’re going to see more pain for a while until they learn to manage better and disperse the visitors.

Tourism, among many other things, has helped fuel job creation across the continent and has reduced the gap between rich and poor countries, especially in South-East Asia. However, obviously, all this success comes at a price; in this case, a high one. The lack of management and regulations has led to overcrowding, traffic congestion, deterioration of quality of life, untreated waste as well as biodiversity loss, wildlife extinction and pollution at levels that had never been reached before (Xu, 2019). The map below shows, according to Responsible Travel (n.d.), all the destinations in Asia that may be facing overtourism.



Figure 9. Overview of all the destinations in a state of overtourism identified by Responsible Travel. Source: Responsible Travel

Tourism is here to stay and, unfortunately, overtourism is becoming a growing challenge in tourist hotspots around Asia. Overtourism should be a major concern, and the intervention of the government and stakeholders is essential to mitigate the negative effects of this phenomenon. The founder and CEO of Khiri Travel, Niemeijer claimed “there’s a lot of growth still possible even for places at breaking point, it comes down to management” (TTG Asia, 2018). The promotional model “the more tourism, the better” has to be reconsidered and, hence, careful planning and regulations must be carried out, in order to ensure sustainable tourism in each tourist destination. The PATA CEO Mario Hardy, seeing the immediate need to reformulate the tourism model, has launched several initiatives to address sustainability. “We have to get together and get this fixed once and for all. We cannot continue to damage this beautiful planet” he said (Ocampo, 2019).

3.1. Factors that contribute to Overtourism in Asia

Today, there are more tourists than ever before and, as a result of the steady rise in tourism, the phenomenon known as overtourism has been gaining popularity. Overtourism is associated with a combination of the following factors:

Travel has become more affordable and accessible: Sixty years ago, travel was not affordable for everyone (Houston, 2019). However, in recent years, the greater economic prosperity and the lower transport cost has allowed people to travel more frequently (Dodds and Butler, 2019; UNWTO, 2018). With the

emergence of low-cost airlines, such as AirAsia, traveling is cheaper and, in addition, new routes and exotic destinations have been established (Thomas, 2019). Apart from flying, cruises have also become a budget-friendly way to travel. As more and more people decide to go on a cruise, the list of itineraries is increasing, there are more ships and they have increased in size to accommodate a larger number of passengers (CLIA, 2018).

The fast expansion of the middle class: Changes in visa restrictions and the fact that travel is becoming more affordable than ever before (UNWTO, 2018), has allowed new tourist segments to emerge (Dodds and Butler, 2019). The rapid growth of the middle class globally is one of the main reasons behind today's rising tourist numbers (Florida, 2018). China's growing wealth in recent years has made the country responsible for much of this tourism boom. The number of overseas trips made by Chinese travellers dramatically jumped from 10.5 million in 2000 to an estimated 150 million in 2018, making its citizens the most abundant tourists all over the world (Blackall, 2019; Lowrey, 2019). In Asia, 79% of tourism is intraregional, making Chinese tourists the most frequent visitors to Asian destinations (UNWTO, 2019).

Competition for space, amenities and services: With the emergence of P2P platforms such as Airbnb, the accommodation supply during a trip has been revolutionized (Jordan, 2016). These platforms are very popular in Europe and are being increasingly used in Asian destinations such as the Philippines, Singapore or Indonesia (Hollis, 2017). While these applications allow tourists to enjoy a more local and authentic experience, residents feel an invasion of their own privacy due to the constant influx of tourists to their neighborhoods and, as if that weren't enough, the local community has to compete with tourists for space, services and amenities (Dodds and Butler, 2019).

Destinations lack of control over the flow of tourists: According to Dodds and Butler (2019) "destinations are unable to control the number of tourist arrivals, as they usually have no control over transportation facilities, in particular, airports and cruise ports", adding to this the increasing number of illegal rentals that operate unlicensed or unofficially and that do not allow an exact control of the number of arrivals (TTR, 2018).

The role of new social media: The increasing popularity of social media is playing a significant role in the travel industry. Films and series such as *Memoirs of a Geisha*, *The Painted Veil* or *Indochina*, have had such a significant impact that travelers have been drawn to the locations shown in them (Fisher and Bullock, 2018). Furthermore, the Internet has completely changed the way we communicate; so much so that we find a substantial portion of travel-related content on social networks. It is no wonder, then, why so many apps and platforms have sprung up that are devoted solely to travel, namely the world-famous "tripadvisor" (Gretzel, 2019). In addition, the emergence of new social networks, such as Facebook, Instagram or Pinterest have served as means of promoting destinations and changed the "ethos of travel" (Fisher and Bullock, 2018). These social networks have influenced to the point that millennials choose their trips depending on which locations are more "Instagrammable", to take photos and share them on said networks (Xu,

2019). Clearly, the content of social networks influences the choice of certain destinations and affects traveler's behavior, especially the younger generations, but it is not the main cause for encouraging overtourism.

Lack of government intervention: For years, governments have ignored overtourism and treated the tourism industry like any other (Peltier, 2018). Consequently, an increasing number of destinations are now struggling with it. The lack of careful planning, coordination and regulation among stakeholders (Goldsmith, 2019) has led to overcrowded destinations, residents' anger, poor experiences for tourists, as well as environmental damage (Kiwano Hotels, 2019). The lack of leadership and the "the more tourism, the better" mentality has led to an overpromotion of destinations, regardless of the consequences (Goldsmith, 2019).

4. Evidence about destinations affected by Overtourism in Asia

4.1. Boracay and the strategy to combat Overtourism

Boracay is a tiny tropical island, located off the northwest corner of the island of Panay in the Western Visayas region of the Philippines, in South-East Asia. With a total land area of 10,32 km², the island is approximately seven kilometres long and its narrowest point is just under a kilometre wide (Detourista, 2016). The island is well-known for its idyllic turquoise waters, sugary white sands and a vibrant nightlife.

For decades, the beauty of the island was a well-kept secret. However, in the 70's, two movies filmed in Boracay were released and, for the first time, the stunning paradise was displayed all over the world (Contribution, 2019). A few years later, the German traveler Jens Peter wrote the book *Philippines Travel Guide*, where he described the island as "paradise on earth". Although the first signs of tourism date back to 1970, Boracay saw a steady increase of tourism during the 80s, as the island became very popular among backpackers who were looking for an affordable vacation (Spurrell, 2018). Investors from the nearest centres, like Caticlan, Manila or Roxas saw the tourist potential of Boracay and started to build facilities in order to accommodate the increasing number of visitors (Alcazaren, 2018).



Figure 10. "Old" Boracay between 1960 and 1970. Source: De Guzman, 2017



Figure 11. Boracay back in the 80s and 90s. Source: Del Campo, 2013

With the opening of the Shangri-La Boracay Resort & Spa, the first luxury hotel on the island, the number of visitors jumped from 260,000 annually in 2000 to 650,000 in 2009. The pristine island quickly became world-famous when, in 2012, it was awarded “Best Island” by Travel+Leisure magazine and, due to its international fame, experienced a massive increase in tourist arrivals, receiving 1.2 million during that year (Spurrell, 2018). Over the years, Boracay has received several awards from travel agencies and publications, which have made the island even more attractive and more tourists eager to visit its signature turquoise waters and unique sunsets (Villareal, 2017). Although during the following years the flow of tourists was slightly more moderate, the number of arrivals hit a new record in 2017, with more than 2 millions visitors (see figure 12), 276,491 more than in 2016, which represented a sharp increase of 16% over the previous year. Boracay is a popular destination for Chinese and Koreans, accounting for 69% of all foreign tourists’ arrivals in 2017 (Burgos, 2018). This dramatic growth put an enormous strain on a tiny island that had inadequate facilities to accommodate such a large number of visitors and, as a result, experienced the negative effects caused by the phenomenon known as overtourism.

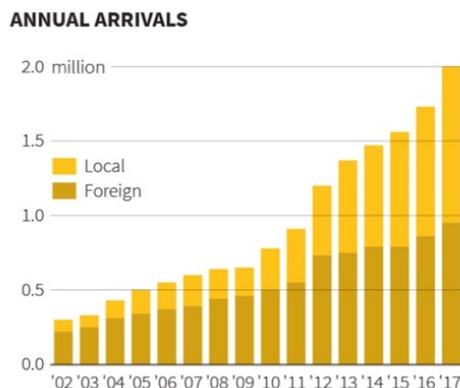


Figure 12. Domestic and foreign annual arrivals in Boracay. Source: AFED

According to the study of the island's carrying capacity, published by the Department of Environment and Natural Resources (DENR), Boracay can only accommodate a total of 54,945 people at a time (19,215 tourists and 35,730

residents). It is estimated that, in 2017, the average population of the island per day was around 70,781 (18,255 tourists and 52,526 non-tourists), which could be translated into a population density of 6,858 people per square kilometre, clearly exceeding the carrying capacity. The study revealed that the number of tourists is not an issue on regular days, but that, the problem emerges during peak months, as the affluence of tourists is generally higher and, therefore, the capacity limits are crumbled. Only 6,405 tourists should enter the island per day, assuming that tourists stay on the island for an average of 3 days. Nevertheless, as the line graph shows, during the month of April, an average of 8,374 tourists arrived to Boracay per day, exceeding its daily capacity levels by 1,969 visitors (Rey, 2018; Cruz and Francis, 2019).

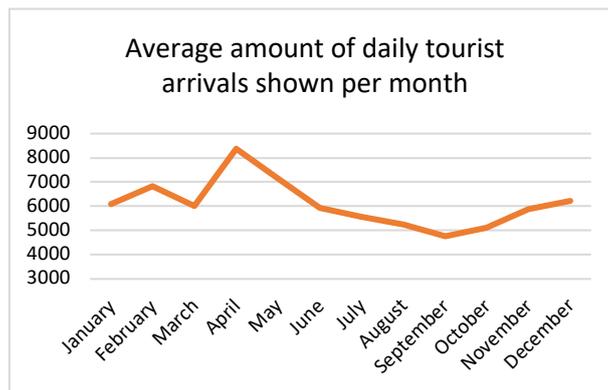


Figure 13. Boracay tourist arrivals by month in 2017 Source: DENR

Likewise, the number of hotels and rooms also exceeded capacity levels. At the Department of Tourism (DOT), there were 430 registered hotels and beach resorts, although the inter-agency working group found 525 hotels on the island of Boracay, a much higher number than that officially registered. The study assures that 249 hotels are enough to accommodate optimal levels of capacity. Regarding the amount of hotel rooms, while the carrying capacity requires only 8,355 rooms, prior to the closure there were 14,456 rooms (Rey, 2018; ERDB & UPLB, 2018).

On the other hand, the lack of a proper plan to treat waste and the inexistence of an appropriate sewage system were a major issue on the island (Contreras, 2018). According to the DENR, the average weight of solid waste generated should not exceed 80.77 tons per day. Sadly, this number was surpassed as the study revealed that 90 tons of solid waste were generated daily. Additionally, the sewerage treatment plants (STP) had a capacity of 12 million liters per day, but before the closure, the island was generating about 18.23 million liters of wastewater per day, well above capacity (Rey, 2018).



Figure 14. Pollution on Bulabog Beach before closure. Source: Marshable

The continuous influx of visitors, a poorly-planned environmental infrastructure and the government's failure to enforce law regulations made Boracay uncontrolled and uncontrollable. Furthermore, the problems with the sewage system and the accumulation of waste caused serious health and environmental problems. For instance, the DENR reported that on Bulabog Beach (Figure 15) the levels of water pollution by faecal coliform (*e.colis*) were 47 times higher than the permissible limits, causing skin infections and stomach discomfort (Cruz and Francis, 2019; Varga and Terrier, n.d.). In addition to water pollution, unmonitored snorkeling and illegal fishing destroyed about 70 percent of the coral cover (Ranada, 2015). "It's a shame that Boracay, which has repeatedly been recognized by prestigious travel magazines as the world's most beautiful island, may yet end up a paradise lost if water contamination continues", Tourism Secretary Wanda Teo said in a statement (Koraba, 2018).

Catherine Heald, luxury travel specialist at Remote Lands, expressed her opinion about the situation in Boracay saying that "there are simply too many hotels and tourists on a small island with inadequate infrastructure to handle important issues like sewage, sanitation, garbage, and pollution" (Spurrell, 2018). At the same time, Maria Ela Atienza, Professor of Political Science at the University of the Philippines state that "the issue of too many tourists and its impact on the environment are a result of years of neglect and bad governance" she added "there were cases of corruption at resorts who were able to get building permits even though they were violating standards, so what is really needed are accountability mechanisms to stop this from happening" (Hayness, 2018).



Figure 15. Piles of garbage dumped on a hillside on the island. Source: Condé Nast Traveler

Recognizing the critical situation into which Boracay had fallen, in February 2018 the President of the Philippines, Rodrigo Duterte, declared the island a "cesspool" and proceeded to its total closure as a tourist destination for the following six months (McKirdy, 2018a). During his speech, he said that "you go into the water, it's smelly. Smell of what? Shit. Because everything that goes out in Boracay... it's destroying the environment or the Republic of the Philippines and creating a disaster coming" (Tomacruz, 2018). The main purpose behind this unexpected decision was to use the hiatus to rehabilitate the island, creating an efficient sewage system, improving the infrastructure and developing a strategic plan to ensure the sustainability of the island (Varga and Terrier, n.d.).

Bearing in mind that Boracay has always been considered a core element for the economic growth of the country, contributing 20% of all tourism revenue (Manila Standards, 2018), the opposition of the private sector in the face of the closure is understandable. According to stakeholders, this decision would have long-term implications in the Philippine tourism industry. For this reason, they asked the government, unsuccessfully, to only close the island for 60 days and that they would do the cleaning and rehabilitation of their own properties. "Yes to rehabilitation, but no to closure. Boracay is the centerpiece of Philippine Tourism and closure of the island will harm the entire Philippine Tourism Industry, with massive and long-lasting repercussions" they stated (Leonen, 2018).

The island's shutdown meant the cancellation of about 700 reservations (Desiderio & Ramirez, 2018), flight suspensions (Dela Paz, 2018) and 36,000 people losing their place of work and being forced to change jobs in order to make ends meet (Domingo, 2018). Anabella Wiesnewski, President at Raintree Hospitality Group, completely disagreed with the president's decision and claimed that the island stakeholders had to suffer for the local government's incompetence and corruption "Why are we, the island stakeholders, paying for the government's own mistakes?" she asked (Arnaldo, 2018).

Nevertheless, not everyone reacted negatively to the "state of calamity" declared by Duterte, as many people considered that this period would help the island to heal. A Canadian resident in Boracay remarked that, "it's time to leave. Boracay has lost its soul, even if restored" (Cruz and Francis, 2019). "We fully support the government's intention to make Boracay fully safe and environmentally friendly. Sustainable development is of critical concern, and we are one with the laudable goal to revert the island to a balanced eco-tourism paradise" said Jaime Bautista, president of the Philippine Airlines (PAL). Moreover, he assured that the company would offer tourists the option of either to rebook, refund or reroute their cancelled flights without any penalty or charge, and would also add alternative routes to other domestic destinations so as not to ruin tourists' holidays (Desiderio & Ramirez, 2018). At the same time, the President of Dream Cruises, Thatcher Brown, also supported the government's initiative (Arnaldo, 2019).

While the decision did not please everyone, all parties made a gargantuan effort during this hard time to rehabilitate the island and recover the crystal-clear

water and the white sand beaches that used to characterize Boracay (Rendon, 2018).

After a tough six months for everyone, it was on October 26, 2018 when the idyllic island of Boracay re-opened with new rules that aim to restrict tourism to make it more sustainable (Varga and Terrier, n.d.). Whereas the temporary closure allowed to clean up the beaches, reduce the levels of water pollution due to the faecal bacteria *E. coli* and create an efficient sewage system, the rehab of the island was 80% effected, as some infrastructures such as the road system, have yet to be completed, so there is still significant work to be done. The government assures that they have established a long-term plan to repair all the damage caused and, thus, return this destination to its "former glory" (Eslit, 2018; McKirdy, 2018b). For now, we can once again relax and enjoy our days in this beautiful paradise which is cleaner, safer and less-crowded (Jackson, 2019).



Figure 16. Boracay after six months of rehabilitation. Source: Newsome, 2018

With the aim of maintaining this iconic destination gleaming and shimmering, the government established strict regulations and limitations that tourists, locals and stakeholders must strictly comply with. Some of these rules include (Timbrook, 2019; McKirdy, 2018b):

1. Tourism numbers have been strictly limited. Following the Interagency Task Force recommendations, Boracay has established a daily cap, which means that only 6,405 tourists are allowed to enter the island per day.
2. Travelers must show their hotel reservations at the arrival and you can only book hotels that are accredited by the Department of Tourism.
3. Smoking, drinking and dining on the beach is completely forbidden, as are beach parties.
4. Casinos have been banned from operating on the island.
5. Single-use plastic is completely prohibited.
6. During peak season and popular holidays, cruise ships are banned, as well as any vessel with a higher capacity than 2,000 passengers.

While it is true that the six-month shutdown caused financial losses and other difficulties, most stakeholders consider that the closure of Boracay was fully worthwhile. Aklan Governor Florencio Miraflores said that “sacrifices have been made but everyone believed that it’s all worth it” (Rendon, 2018).

At the same time, tourists still want to enjoy their vacation here, despite the strict measures imposed. Many people have voiced their opinion about the “new” Boracay through social networks. For instance, the famous youtuber Lost LeBlanc who was on the island before the closure, wanted to see for himself the rehabilitation and was surprised by the incredible work done. He said “it’s just like immaculate right now, it’s the perfect clean beach. The water here is just about the cleanest I’ve seen, it’s so crystal clear” (LeBlanc, 2018). At the same time, GMA news, the leading news network in the Philippines, decided to interview island residents to ask them how they saw Boracay after the temporary closure. A British lady who fell in love with the island during her vacation and years later decided to open a restaurant, said “the beach became beautiful again, the sand was so white and fluffy and the water was cleared, so it brings me back to when I first came here in the 80s” (GMA, 2019).

Due to the six-month closure, only 941,000 tourists were registered in 2018. However, during the following year, Boracay attracted over 2 million tourists, of which 932,433 were domestic and 1,102,166 internationals. In fact, this figure is very similar to that of 2017, but this time Boracay had the appropriate infrastructure to accommodate such a large number of visitors in a tiny 10 km² island. China, Korea and Taiwan remain the top three visiting countries of the island, followed by the United States (Zabal, 2020).

The DENR assured that they will apply a similar rehabilitation model in other provinces such as Palawan, Bohol or Surigao del Norte where they are starting to struggle with the impact of overtourism. The Environment Secretary Roy Cimatu said, “since we have already started in Boracay, let’s continue these rehabilitation efforts for the sake of the Philippines and the Filipino people, so that they can have something to be proud of” (Tolentino, 2018). So far, it seems that the measures taken in Boracay are a step in the right direction, as the island has regained the magic it used to possess. Even though we have to take into consideration that every destination has its own characteristics (Maggi and Fredella, 2010), Boracay could become a successful model of responsible and sustainable tourism, to serve as a reference for those destinations that also face or will face overtourism (Casey, 2019; Varga and Terrier, n.d.).

5. Policies recommendations to mitigate Overtourism in Asia

As already mentioned in this paper, every single destination is unique, having different features, types of tourism and life cycle (Maggi and Fredella, 2010). There is no single pattern that can be applied to overtourism; what works in one destination may not work in another. However, undoubtedly, the direction to be followed to smooth out this phenomenon depends on the mix of challenges that the destination is struggling with. The World Travel & Tourism Council (2017) has identified the following approaches to mitigate overtourism:

5.1. Smooth out visitors

5.1.1. Limit the number of arrivals

The mentality "the more tourism, the better" has pushed numerous tourist destinations to their limits (Goldsmith, 2019). While restricting tourism can cause financial losses and is not to the traveler's liking, it is an absolutely necessary policy to protect and preserve the most fragile destinations (Jowaheer, 2015).

Following the recommendations of The Boracay Interagency Task Force, a daily cap has been established in order to ensure that the carrying capacity is not exceeded. Only 19,215 tourists may stay on the island at a time and only 6,405 visitors are allowed to enter per day (Timbrook, 2019).

5.1.2. Implementation of reservation and ticketing systems

An increasing number of tourist attractions, such as museums, theme parks or hiking trails, are using or considering the use of reservation and ticketing systems to avoid overcrowding (Buckley, 2019). In the case of Boracay, nowadays, it is completely forbidden to enter the island without a booking in an accredited hotel. In fact, before entering the island, at the Caticlan Jetty Port, every tourist is required to present a proof of their reservation (McKirdy, 2018b). While the island has not yet implemented this tactic on its beaches, it could be useful, especially during peak season, when the most popular sites like Bulabog and White Beach get very crowded. In this way, we could control the amount of people on the beach and, thus, avoid overcrowding. In addition, it would be interesting if Boracay developed an app where visitors could purchase online tickets in advance and see if the beaches are congested.

5.1.3. The use of technology to smooth congestion in real time

Whilst the use of new social networks has encouraged the concentration of tourists in specific sites, technology can also help us smooth congestion out in real time. Some destinations are already using the real time data to disperse tourists to less popular places (McKinsey & Company and WTTC, 2017). A few years ago, Google introduced a new feature that uses real-time data from users' anonymized location and searches. This tool provides information such as the degree of occupation of a place at different times of the day, how much time people usually spend or estimated waiting times (Google, 2020).

As other tourist destinations are already doing, Boracay could develop an app where tourists would have real time information of the most congested attractions (beaches, restaurants, roads, etc.) and suggestions of alternative places. In this way, we would push visitors away from the crowds and promote, in a non-commercial way, the beauty of other less-known areas of the island (McKinsey & Company and WTTC, 2017).

5.1.4. Expand the seasons and change the approach to promotions

The WTTC recommends that destinations suffering from seasonality use a mix of actions to promote the place during off-season and thus disperse traffic throughout the year (McKinsey & Company and WTTC, 2017). So far, Boracay has not carried out any promotional campaign during off-season. However, traveling to Boracay during the low season means, in addition to air tickets, accommodation and even meals at lower prices, let alone enjoying its turquoise waters and miles of white-sandy beaches away from the crowds (The Travel Ninjas, n.d.).

5.2. Spread visitors among different places

Tourists tend to concentrate on specific sites within the destination and, therefore, congest the area. Thus, the tactic known as “spreading” can be very helpful in relieving sites that suffer from overcrowding, as it consists of redistributing tourists geographically to other existing or new destinations. This works best for repeating tourists, because first-time visitors always want to go to “must-see” sites (Peeters et al., 2018; McKinsey & Company and WTTC, 2017). Spreading initiatives can be done by:

5.2.1. Promotion of less-visited attractions

It seems that in Boracay all efforts have always been concentrated on promoting White Beach and Bulabog Beach. However, the island has a lot more to offer than those popular spots. Tour operators, travel agencies, journalists and travel bloggers have started to promote and recommend alternative locations for those who want to stay away from the tourist crowds. For example, during sunset, the two main beaches are usually packed with tourists taking photos, so in order to shift visitors away from those overburdened beaches, Boracay has been working to promote Diniwid Beach as an alternative place (Bongo, n.d.; Suliano, 2019).

5.2.2. Developing new route and attractions

This approach can be very beneficial to destinations, as it helps to decongest the most visited sites and develop new routes and attractions. It should be noted that this tactic requires the support and collaboration of the public and private sectors. It is also essential that the new routes and attractions we want to promote have the appropriate infrastructure to accommodate tourists (McKinsey & Company and WTTC, 2017).

In the case of Boracay, when President Duterte announced the temporary closure of the island, the Senators Ejercito and Angara claimed that “this is a chance for other equally beautiful places and hidden wonders around the country to be discovered while Boracay is undergoing rehabilitation”. The senators, together with the Department of Tourism (DOT) and stakeholders, began to work on a campaign to promote other hidden destinations of the Philippines (Torregoza, 2018).

On the other hand, as cruise ships have limitations and are banned during peak seasons, in order to ensure that the Philippine economy was not impacted by this regulation, alternative destinations such as Iloilo and Bacolod in Central Visayas, Bohol in Central Visayas, Subic and Bataan in Central Luzon, Ilocos Norte and Ilocos Sur in Ilocos Region were offered (Arnaldo, 2019).

Asia Pacific Projects founder Narzalina Lim said that “The beaches may not be as beautiful as Boracay but the resorts can be designed in such a way that there are several pools, entertainment areas, shopping and dining that tourists need not look for a Boracay, Panglao, or Northern Palawan experience. These island destinations should have more upmarket, luxury accommodations – low volume, high yield” (Ocampo, 2019).

5.3. Adjusting price as a tool to balance supply and demand

While it can be an efficient measure to mitigate overtourism, destinations must adjust prices carefully, to avoid issues related to elitism and the impact it can cause on the local community (McKinsey & Company and WTTC, 2017).

5.3.1. Fees and taxes

In order to get to Boracay, every tourist has to pay a Terminal Fee of Php 100 and an Environmental Fee of Php 75 (Detourista, 2019). Furthermore, Mount Luho is now collecting an entrance fee of Php 120 per person for the maintenance of the place (Piccio, 2016).

Another initiative that Boracay could consider is the implementation of an eco-tax, as its main purpose is collecting funds to finance sustainability projects, such as improving the environment and infrastructure (Graci and Dodds, 2010). In the case of Boracay, the funds could be used to install bio rocks for coral reef regeneration, improve the roads, refurbish run-down buildings and treat waste.

5.3.2. Variable prices

Fluctuating prices in relation to the type of visitor, based on demand or to reduce seasonality, are increasingly common, especially in places where large masses of visitors gather. For example, museums or historical monuments provide free or discounted tickets to locals, the elderly or students, and foreign visitors have to pay a tourist price. Other tourist' attractions, such as The Burj Khalifa, are offering different prices depending on when the demand is highest. (McKinsey & Company and WTTC, 2017). These techniques are currently not implemented in Boracay, since you do not pay to go to the beach, which is its main attraction. Nevertheless, what the island is already doing is offering much cheaper prices for flights, accommodation and activities in the calm periods, and more expensive ones in high season, to reduce the extreme peaks and have a more uniform influx of visitors throughout the season (UNESCO, n.d.; The Travel Ninjas, n.d.).

5.4. Regulate accommodation supply

In order to control and manage growth, this tactic can be immensely effective in mature destinations facing overtourism. Before the closure of the island, government inspectors discovered that many hotels were unregistered and that, on top of that, the vast majority of establishments were dumping untreated waste into the sea (Rey, 2018; Rodgers, 2019). For this reason, after the six-month shutdown, the government stated that prior to operating, every establishment must obtain the necessary permits and/or accreditations from the DOT, DENR and DILG (De Vera, 2019). Boracay Inter-Agency Task Force regularly updates a file listing the accredited hotels and properties. The latest list was uploaded on February 28, 2020, registering a total of 394 establishments accounting for 14,289 rooms (Espina, 2020). Furthermore, as mentioned above, before entering Boracay, everyone must show their reservation as proof that they have booked at an accredited establishment (McKirby, 2018b).

5.5. Limiting or banning activities related to tourism

The measures described in the previous sections may not be enough when the impacts of overtourism critically affect the local residents, the environment and the culture of a destination. Thus, as an extreme tactic, destinations are forced to limit or prohibit certain tourism-oriented activities (McKinsey & Company and WTTC, 2017).

In the case of Boracay, when the island reopened its doors, the government decided to establish a great amount of limitations to preserve the island. In addition to limiting the number of daily visitors and reducing the amount of rooms, drinking, smoking and dining on the beach is forbidden, as well as hanging lights in the palm trees and having souvenir shops on the beachfront. Also, digging sandcastles on the beach can earn you a fine of up \$50. Water sports and diving activities are forbidden until further notice. Single-use plastic is also prohibited and the hotels, resorts or restaurants that violate this rule three times will immediately lose their license. Furthermore, the popular "LaBoracay" parties which, according to local authorities, in 2017 attracted up to 70,000 tourists and left 10,000 kg of rubbish, have been banned. At the same time, casinos have been demolished and, thus, gambling is forbidden. The last two have been possibly the most drastic measures the government has had to take due to the financial losses involved (Villanueva, 2018; Morris, 2018). Last but not least, during peak season and popular holidays such as Chinese New Year or Holy Week, cruise ships are banned and it is forbidden to make port calls on the island for those with a higher capacity than 2,000 passengers (Arnaldo, 2019).

Although such strict measures should be taken as a last resort, residents, stakeholders and even tourists supported the need to implement them in Boracay so that not only the present generation can enjoy its beauty, but also future generations (Villanueva, 2018). Roy Cimatu, The Environment Secretary said that in order to ensure that tourists comply with environmental guidelines, there would be more police along the beaches. "We will be monitoring those

littering on the beach, and there will be corresponding penalties. We will really implement ordinances and laws on the environment” he assured (Burt, 2018).

6. Conclusions

Asia is the second most visited continent in the world and, by 2022, is expected to have the highest volume of international visitors. The rise of the middle class, the low-cost carriers and the increase in connectivity, together with the lack of leadership are some factors that have enabled an increasing flow of tourists and has led to overtourism in many Asian destinations.

Throughout this paper we have observed that the issue is not the increase in the number of arrivals but the lack of cooperation, planning and legislation from the private and public sectors. It is essential that governments and stakeholders work together to combat this issue, by managing tourism development, especially in fragile and crowded destinations.

The lack of an efficient sewerage system and untreated water, as well as overcrowding and lack of government intervention, made the president of Boracay take the exceptional decision of temporarily closing the island. Boracay was a victim of its own success and paid a very high price for it. To prevent this situation from happening again, very strict measures were taken. If the public and private sectors had acted from the beginning through effective planning and dispersal policies, the conditions in which Boracay was seen could have been avoided.

In conclusion, overtourism is a major issue of the 21st century and it is of utmost importance that everyone is aware of the negative consequences that this phenomenon can cause to the environment, to local communities and even for tourists. The situation that the whole world is experiencing today, in which the coronavirus keeps travelers away, transforming destinations from overtourism to no tourism at all, may be a great chance for stakeholders and governments to reconsider the promotional model "the more tourism, the better" and get involved with new policies and regulations to ensure a sustainable tourism development model.

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