14

Theoretical Perspectives on the Emerging Roles of Key Players in Setting Tourism Carrying Capacity: Philippine Case Study

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I. Introduction

Tourism in the Philippines has been marred with reactionary and haphazard policies on unprecedented growth that has brought environmental damage. While it is predominantly private sector–driven, understanding the interaction of key players is necessary to promote sustainable tourism.

Björk (2000) earlier identified the key players as authorities, tourists, tourism businesses, and local communities in an ecotourism framework. Cortez and Rivera (2016) argued that the interaction of these players, earlier seen in the Philippines as unbalanced, is not balanced and that the private sector plays a vital role in tourism management. They also characterized the coordination by national and local government and the rest of the players as weak in promoting and managing tourism.

Recent events, however, show the emerging role of authorities as a driving force in the key players as the government through its environment ministry shut down Boracay, a prime tourist destination due to unsustainable tourism practices. The island was closed for six months to allow nature to heal itself and for stakeholders, businesses, and the local community to act together to comply with environmental standards. Literature points to similar practices from Europe and nearby coastal destinations in Southeast Asia. This study is significant to the Philippines, which has experience in mature destinations caused by unprecedented growth and at the same time in developing new destinations. Identifying the roles and its interaction dynamics allows the emergence of drivers of tourism in a locality or destination.

This chapter aims to answer the following research question: *what are the emerging roles of the key players in setting tourism carrying capacity?* Specifically, this chapter aims to determine how the interaction of key players (authorities, tourists, tourism businesses, and local communities) among itself and themselves (in a case dynamics matrix) determines tourism carrying capacities in the promotion of sustainable tourism.

The literature review in the following section elaborates on theoretical development that frames policies and actions into overarching and supporting theories on tourism. Starting off with sustainable tourism frameworks and the elaboration of the key players, concepts on natural, environmental, and social carrying capacities are discussed. Theoretical bases for actions and policies are referenced to build on the growing literature of sustainable tourism.

As a qualitative case study, this chapter uses a case dynamics matrix to frame the interaction of key players leading to theoretical propositions, a buildup from Björk's ecotourism model.

This chapter concludes with policy actions that may stem from theoretical propositions such as the consideration of the sociodemographic profiling of tourists, branding and packaging of tourist destinations, and quantitative and qualitative carrying capacity models. Furthermore, the importance of host local communities in taking ownership and active participation is highlighted.

II. Theoretical and Literature Review

A. Sustainable Tourism Defined

In this chapter, sustainable tourism is contextualized within the *Prudence and Conscious Limitations* perspectives. Khallis and Coccossis (2004) suggest that because of "our actions, it is necessary to complement the emphasis on democratization and inclusiveness with prudence and ecological impacts." Consequently, this leads to an understanding on "acceptable, precautionary social and ecological minima" (Kapp, 1983) and transferring legacies to future generations (Bromley, 1998; Norgaard, 1992). This is consistent with the technical definition of sustainability that is meeting the needs of current generations without compromising the ability of future generations to enjoy the same with the three pillars of economics, environment, and society (World Commission on Environment and Development, 1987).

Tourism in the Philippines is predominantly nature-based, so we adopt an overarching framework by Björk (2000) on ecotourism that involves the cooperation of four central group of actors, namely, authorities, tourists, tourism businesses, and the local community. Consequently, to reach a state of sustainable tourism, development should be guided by the following principles: (1) focus on long-term economic benefits, (2) sensitivity to the needs and aspirations of the host population, (3) respect on the character of the area, (4) intrinsic value of the environment, and (5) ecological and economic balance (Owen, Witt, & Gammon, 1993).

In the World Economic Forum Report of 2013, the Philippines ranked number one in the travel and tourism government expenditure as a percentage of the total budget in 2011. This shows how serious the country is in marketing this sector but failed considerably in the category of effectiveness and branding to attract tourists by ranking 85th out of 140 countries (World Economic Forum, 2013). Björk (2000) highlights the importance of meeting the diverse interpretations of what ecotourism stands for from a marketing perspective. The overwhelming flow of information from the Internet and social media set quick but high expectations from travelers. Based on the most recent Travel and Tourism Competitiveness Index of the World Economic Forum (WEF) in 2019, the country ranked 75th, a four-point improvement from 2017.

The key sub-indices that contributed to the country's ranking are price competitiveness, human resources and labor market, prioritization of travel and tourism, and natural resources (WEF, 2019). Based on these indices, at the national government level, tourism is clearly a priority; however, at the local level, issues on implementation and sustainable management still persist.

Cooperation within the industry and among its stakeholders, therefore, is key for tourists to experience tourism in a way that does not exploit resources but contribute to sustainable development. Other considerations are the price tourists are willing to pay and their level of comfort versus preserving authenticity of site attributes (Björk, 2000).

International tourism arrivals have breached 1.4 billion in 2018, two years earlier than it was predicted (WEF, 2019). This spectacular growth gave rise to management problems that policy makers aim to address proactively. Due to tourism's multiplier effect on a country's economic indicators, many countries and destinations compete for tourist arrivals. Impacts on the environment have earlier been highlighted, but recently, effects on economic structures, social structures, cultural structures, and lifestyle have been determined (Coccossis & Mexa, 2004).

Therefore, in lieu of ecotourism in the Philippines, we adopt the primary objectives of sustainable tourism development that is "enhancing the welfare of those affected by it, through increased economic opportunity, preservation of the local community's cultural and natural heritage, and an enhanced quality of life" (McCool & Lime, 2001).

B. Carrying Capacity Concepts

Numerical limits and conditions. This suggests the limits in the flow of tourists to particular destinations. Earlier experiences on overcrowding, tourist satisfaction, community displacement, and more specifically environmental degradation has led some authorities to close down tourist destinations and/or assign numerical limits and other operational control measures at various levels. Different carrying capacity concepts are discussed below.

The World Trade Organization United Nations Environment Programme defines carrying capacity as "the level of visitor use an area

can accommodate with high levels of satisfaction for visitors and few impacts on resources" (WTO/UNEP, 1992) while McIntyre (1993) adds concerns for the society, economy, and culture of the area.

It is apparent that carrying capacity definition highlights satisfaction, impact on resources, and its stakeholders, thus making it a management notion. However, there is a debate on the assignment of limits to a site. While setting numerical values is a typical interpretation of limits (such as number of visitors), management needs to consider further conditions. Lindberg, McCool, and Stankey (1997) argued that managing visitor quantity may be easier than managing conditions initially and more effectively.

Furthermore, Lindberg et al. (1997) and McCool and Lime (2001) challenged carrying capacity concepts by asking what are the "appropriate or acceptable" conditions of setting limits rather than determining a numerical value. This aims to set an agreement on desirable social and resource conditions henceforth. By focusing on the acceptable or desirable social and biophysical conditions, it is more efficient for management to strategize based on these and its equivalent standards of quality than relying on a numerical value set for carrying capacity. Hence, there is a need to establish frameworks on identifying a desirable condition for the economy, society, and environment, where a consensus is reached among key stakeholders (McCool & Lime, 2001). Meanwhile, limits could as well be manipulated due to their flexibility. As a response, Salerno et al. (2013) suggested that there should be a balance among tourism carrying capacity components as a part of a decision-making framework that includes the integration of different cultural approaches and policy needs.

Alternatively, Cortez and Rivera (2016) proposed a sustainable tourism framework characterizing tourism in the Philippines as predominantly private sector driven with weak coordination between national and local government and where the importance of host local community participation is highlighted. Subject to further testing and validation, different site attributes in the Philippines have different interaction dynamics.

Furthermore, in advancing the desirable or acceptable condition, the concept has moved to discussions focused on determining how much change from natural conditions is amenable given the goals and

objectives of an area (Lindberg et al., 1997; McCool & Lime, 2001). Other attempts at framing carrying capacity by policy makers are the following: Limits of Acceptable Change (Stankey et al., 1982), Visitor Impact Management (Farrell & Marrion, 2002; Graefe et al., 1990), and Visitor Experience and Resource Protection (Shelby & Heberlein, 1986). These attempts, however, are arguably deemed reactionary in nature (Lawson et al., 2003; Salerno et al., 2013).

Numerical limits and acceptable or desired condition correspond, however, to the phase of development according to a destination's tourism life cycle assessment. Martin and Uysal (1990) present that there should be a synergistic relationship between carrying capacity and life cycle. Planning is necessary at the *exploration stage* with impact assessment to include zoning, construction, and environmental protection laws. At the *growth stage*, control of development such as training in hospitality services, managing the general attitude of the local population, infrastructure investments, and provision of financial services to sustain development is important. The most common problem is in the *mature stage*, where policy development focuses on prevention of decline. Furthermore, in countering apathy of local residents, the benefits of tourism activities must be established. Attitudes of friendliness, environmental deterioration, and other immediate practical measures of maintenance are deemed necessary to revive a destination. Additional investments in infrastructure may include beautification projects and refurbishing of existing structures. Finally, at the *decline stage*, decision is necessary to restore or rejuvenate the areas to make it more attractive to tourism.

Environmental resource and social impact. The concept of tourism carrying capacity also addresses resource and social effects of visitor use (Lawson et al., 2003; Manning et al., 1999; Wagar, 1964). Environmental carrying capacity pertains to energy management, solid waste management, overcrowding, water quality, and forest management; on the other hand, social carrying capacity concerns tourist satisfaction, overcrowding, and impacts on the local community (Salerno et al., 2013). While tourism has clearly positive economic impacts, its corresponding negative social impacts must be avoided as well (Manning et al., 1996).

This perspective considers ecological and social parameters measured into environmental quality and visitor experience, respectively. There is

quite a number of Southeast Asian beach destinations that have fallen into this category of overcrowding, unsustainable quality of services, and deterioration of beach water quality and scarcity of resources like clean drinking water, power, and even food supplies for the local community. Conventionally defined, tourist carrying capacity is "the maximum number of visitors which an area can sustain without unacceptable deterioration of the physical environment and without considerably diminishing user satisfaction" (Mathieson & Wall, 1982; Prato, 2001). Clearly, the basic element of this concept is the need to establish the limit on tourist activity that reflects the concerns and priorities of local managers and planners (Coccossis & Mexa, 2004; Salerno et al., 2013).

Salerno et al. (2013) propose the reevaluation of tourism carrying capacity concept to include qualitative data on perceptions of the main issues of a destination, protection of local traditions, and level of satisfaction integrated with environmental modelling in a participatory framework. This is adopted later in the proposed sustainable tourism framework considering Björk and Salerno's perspectives.

Further into social carrying capacity, Jurado, Damian, and Fernandez-Morales (2013) explained how overcrowding is influenced by tourists—their socioeconomic characteristics, their predisposition to leave versus their satisfaction level. Coastal destinations are characterized by a strong increase in demand and occupation of a large amount of space, both of which having several environmental and social impacts (Garay & Canoves, 2011; Jurado et al., 2013).

Sociodemographic profiling and adjustment mechanisms. From another perspective, destinations are seen to have a product life cycle (Butler, 2011); however, carrying capacity can be increased by marketing and investing into infrastructure or renewal of the products (Jurado et al., 2013). Particularly, some destinations readjust or repackage their tourism products by implementing new information technology and targeting specific market segments (Ioannides & Debbage, 1997; Jurado et al, 2013).

Along the lines of social carrying capacity, scholars reveal that mature tourists who are better educated and have higher socioeconomic status are more beneficial to a destination but are more predisposed to leave due to overcrowding (Hayduk, 1983; Jurado et al., 2013). A low level of authenticity of a destination and a high level of noise are the two

most important determining factors of social carrying capacity. With this, it is important to understand the relationship between tourists and residents. Meanwhile, if tourists perceive residents as friendly, they are more tolerant of the saturation level (Mieczkowski, 1995). On the other hand, familiarity with the destination influences the perception of saturation and the destination threshold (Jurado et al., 2013).

Shelby and Heberlein (1986) suggested the determination of carrying capacity by studying tourists' expectations along with destination managers' predetermined rules. The limit is viewed as a management concept (Lindberg et al., 1997). Managers have to know tourists' thresholds because when this limit is exceeded, tourists flee to other less crowded destinations, initiating the destination's decline and its loss of competitiveness (Jurado et al., 2013).

C. Tourism Practices

Europe. The main contribution of Jurado et al. (2013) to tourism carrying capacity is its application to coastal destinations. While using Costa Del Sol as a case, the findings emphasized its relevance to other coastal destinations like Southeast Asia, particularly the Philippines. With a large volume of tourists visiting the country annually, there are no longer lean seasons in Boracay because Philippine beaches are marketed as having a yearlong summer. From a marketing perspective, this appeals to countries with cold winters and holidays.

Particularly, Jurado et al. (2013) brought the concept of quality tourists with high socioeconomic profile and purchasing power. On the other hand, a study on Benidorm, Spain, suggested targeting middle-class tourists due to site characteristics that might not appeal to higher purchasing power tourists (Baidal, Sanchez, & Rebollo, 2013).

In an attempt to set numerical limits on overcrowding, population density was deemed to have an unequal effect across destinations in the Canary Islands in Spain. Likewise, tourists' perception of overcrowding depends on the sociological characteristics of consumers and the type of tourism in each island (Santana-Jimenez & Hernandez, 2011). Similar studies in Tenerife Island list down problems on tourist activity, imbalance of supply and demand, lack of consensus on environmental matters, and problems in security (Rodriguez, Parra-Lopez, & Yanes-Estevez, 2008).

A multi-stakeholder analysis of Benidorm, Spain, reveals that market effects directly interacted with evolutionary phases of development of the destination, and more particularly, the hotel industry was able to renovate due to public incentives. These reinvestments have had positive impacts on sustaining tourism more than the creation of theme parks (Baidal et al., 2013). This could be in direct reference to site attributes and authenticity of experience earlier espoused.

Asia-Pacific Thailand, Indonesia, the Philippines. Environmental carrying capacity was compared in the Maldives and Nepal, which are faced with similar problems of environmental impacts of tourism. Solid waste disposal, water resources, and depletion of natural resources are adverse impacts on local cultures, and social maldistribution remains critical and could not be compensated by tourism revenues and attempts to set ecological carrying capacity (Brown, Turner, Hameed, & Bateman, 1997).

Particular to coastal tourism, Wong (1998) characterizes unplanned resort development, typical in Southeast Asia, and its negative impacts on the coastal environment. As early as 1998, environmental impact assessment, management of increasing number of tourists, evaluation of small-scale resort development, consideration of conservation, and defining planning standards have foreseen valuable lessons, yet the same problems of disregard persist in the region. Using Pattaya as the pioneering case and replicated similarly in Patong, Thailand; Kuta and Candi Dasa in Bali Island, Indonesia; and Batu Ferringi in Penang Island, Malaysia, there is an apparent pattern of unprecedented resort development. Boracay Island, Philippines, was not immune to this pattern with problems of shortage of potable water, leaking septic tanks thereby polluting groundwater, and eventual coliform contamination of seawater.

Plans for tourism development should include guidelines for environmental management on sewage discharge, shoreline erosion, maintenance of beaches, coral reefs, and other ecosystems and general zones appropriate for tourism. The local government and communities should be involved in the implementation so that human and cultural displacement is minimized (Wong, 1998).

III. Research Design and Methodology

This qualitative case study research uses secondary data in adopting the theoretical perspectives on ecotourism and the interaction of its key players. In an attempt to build a pattern or logic model (Yin, 2018) in this analysis, this chapter adopts an *interpretation and analysis approach* (Willig, 2013) to gain an understanding of the social, political, historical, cultural, and/or economic context of ecotourism following Björk's (2000) model. As a case study, this chapter attempts to present "multiple perspectives of the complexity and uniqueness of a particular project, policy, institution or system in a real-life context" (Simons, 2014), that is, sustainable tourism in the Philippines and the interaction of its key players in determining carrying capacity.

Likewise, Björk's ecotourism players are tested through this country case study, which is a *theory-led or theory-generated case study*. Following his constructs, I interpret it in generating a case with the objective of adapting and building on the theory. Eventually, the new and evolved theory becomes the argument of this case study (Simons, 2014).

As an operational framework, I use a case dynamics matrix, which "displays a set of forces for change and traces the consequential processes and outcomes" (Miles & Huberman, 1994).

A. Propositions

Based on the theoretical review and emerging variables relevant to key players, we have the following propositions subject to validation or falsification, and/or policy-making in various destinations with different lifecycle stages to determine a consensus on tourism carrying capacity.

Proposition 1: Authorities play a driving force in sustainable tourism by promoting what the country has to offer in a safe and accessible environment, targeting varied sociodemographic profiles of tourists, encouraging tourism business by providing incentives, and enhancing local community participation.

Proposition 2: Tourists have the responsibility to comply with country laws, share positive experiences, provide revenue streams for tourism businesses, and respect traditions and culture of local community.

Proposition 3: Tourism businesses have the responsibility for compliance with governance mechanisms, ensuring of tourist

satisfaction, coordination of seamless tourism value service value chain, and provision of employment and livelihood to the local community while protecting the resource base.

Proposition 4: Local community members initiate the protection of their resource base, promote opportunities for heritage tourism, provide the quality manpower and authenticity of experience, and initiate nongovernmental organizations that take ownership on community participation.

IV. Discussion

With the overwhelming problems on the adverse effects of unprecedented tourism volume, a multi-stakeholder approach (case dynamics matrix) is proposed to avoid repeating mistakes of the past and address critical issues in various phases of development of tourism destinations. The interaction of the key players conceptually put carrying capacity, numerical or qualitative analysis of acceptable conditions, in the center of cooperation.

A. Authorities

Boracay Island, the Philippines' premiere destination, was closed to tourism due to environmental neglect, noncompliance by tourist businesses, unplanned resort management, and influx of tourists from all socioeconomic groups. This exhibits the emerging role of authorities at the national level to claim its stake in driving and managing tourism in a mature destination in the country. There are many other destinations in the exploration and development stages, but Boracay has become the template for development with lessons learned, addressed, and hoped to be avoided in the future. Using the life cycle assessment of destination, a proactive approach may likewise be used to avoid repeating the same adverse environmental and social problems.

Within itself, authorities should continue prioritizing at the national level a tourism agenda. Evident in the 2013 WEP Report, improvement of the country's competitiveness index is essential to maximize the benefits for the country and mitigate challenges. One of the factors that hold back the country is security at the national and local level followed by infrastructure. There is a marked improvement in the air transport,

but ground transport synchronization and land transport provision need a massive improvement. Tourists need to feel safe the moment they leave the airport and not be conned by taxi and other tour and transport operators. Tourist destinations should be rid of unlawful and undesirable elements that tarnish the image of the site.

Sociodemographic profiling is essential in channeling marketing efforts of the country. By knowing the sociodemographic groups of tourists, destinations could be developed accordingly. In coordination with tourism businesses, sites may be developed based on different types of tourists and services businesses are willing to invest in.

From a regulation perspective, authorities impose environmental compliance to tourism businesses but may alternatively provide incentives as well for investing in exploration and growth stages of tour sites. Earlier espoused by Cortez and Rivera (2016), tourism in the Philippines is still predominantly private business-initiated.

Most importantly, local community participation should be enhanced to establish a sense of ownership, involvement, and participation. Some of the best practices include actual ownership of islands by indigenous people where entrance and environmental fees are channeled towards cleanup, maintenance, and overall benefits of the community. What is critical is the development of agreements and consensus with the local community who is host to tourism on the assignment of numerical limits and acceptable change to the environment, society, and the resource base.

B. Tourists

Tourists are regarded as customers in this supply chain but have to adhere to immigration laws and comply with environmental protection and other policies of local government. While the quality of tourists is a sensitive issue, the business rationale for sustainable tourism has an economic component. Tourists spend, and the revenue generated has exponential economic activity benefits across the supply chain. Preference for quality tourists with higher purchasing power has better positive impacts on host communities than mass tourism.

In the age of social media and information flowing freely over the Internet, tourists may share the positive experience as the destination benefits from word-of-mouth and virtual advertising.

In interacting with the local community, tourists should consider their responsibility on society and the environment by lessening their impact. Alongside this is respect for the traditions, culture, and way of life of residents who actually live in the tour destination.

C. Tourism Businesses

Tourism businesses have the responsibility to establish a governance mechanism in complying with environmental regulations, preserving local traditions, and protecting host communities.

At the management level, the level of satisfaction has been earmarked by authors as a success factor in sustainable tourism. This highlights the quality of services while considering the cost advantage of the Philippines in the sub-index of affordability. Following sociodemographic profiling, tourism businesses have to consider the personal characteristics of tourists to create value services and not simply follow the mass tourism model.

Among themselves and within the supply chain of allied service providers, coordination is essential in devising a seamless handling of tourism services and products with an overall objective of contributing to the level of satisfaction.

Interacting with the local community, their host, aside from provision of employment and livelihood, tourism businesses have the responsibility to nurture the resource base considering the vast assets and financial capacity they possess. Once acceptable limits are attained, tourism businesses have the responsibility to invest further in environmental cleanup, maintenance, and capacity expansion. Hence, a new consensus on acceptable limits and its impact on the environment and society has to be attained.

D. Local Community

Protection of the resource base is the utmost concern of the local community in its interaction with authorities. These include the environment, site attributes, water resources, and quality of living standards. Tourism has the ability to intrude and disrupt privacy and lifestyle patterns of local communities; therefore, an agreement on what is acceptable change or desirable condition has to be met.

Once local communities are friendlier and receptive to hosting tourist activities, tourists have the opportunity to immerse themselves in local culture and develop a profound appreciation of Filipino culture through heritage tourism, that is, culinary, religion, arts, history, etc.

Local community also provides the manpower requirements of tourism businesses, which the WEF 2019 report highlights as an important sub-index. Hospitable and English-speaking staff in businesses make the experience convenient for tourists, thereby facilitating better tourism in the Philippines.

Finally, local community members must develop a sense of ownership by forging relationships with nongovernment organizations who represent various causes and objectives.

Summarized below is the interaction of the key players.

Table 1. Interaction Matrix of Key Players in a Sustainable Tourism Framework

	Authorities	Tourists	Tourism Businesses	Local Community
Authorities	Prioritize tourism at the national level, promotion of security and infrastructure at the national and local level	Compliance with immigration, environmental and local laws	Compliance with governance mechanisms and taxation	Initiate protection of resource bases
Tourists	Promote internationally to reach sociodemographic factors of tourist profiles	Word-of-mouth advertising by sharing positive experiences	Ensure satisfaction level	Immersion with local culture, opportunity for heritage tourism (culinary, religion, etc.)
Tourism businesses	Environmental compliance, provision of incentives	Revenues via demand for services	Coordination of seamless tourism service value chain	Supply of quality manpower and authenticity of experience
Local community	Enhance local community participation, ownership, and involvement	Lessen negative societal and environmental impacts, respect traditions and culture	Provision of employment and livelihood, nurture of the resource base	Initiate nongovernmental organizations that promote community ownership

V. Conclusion

This chapter highlights the role of the local community in taking ownership in hosting tourism, active involvement, and participation in a sustainable tourism framework as authorities emerge as a driving force in mature destinations. The private sector is still a constant force that has the responsibility to ensure tourist satisfaction and at the same time preserve the resource base. Tourists meanwhile have the responsibility to respect traditions, appreciate local culture, and minimize negative impacts on society and the environment.

By providing a framework for the interaction of these key players, determining an acceptable numerical or qualitative condition may be a multi-stakeholder consensus effort at the various levels of development in the lifecycle of a destination.

The case dynamics matrix of the key players attempts to snapshot the importance of each key player so that the momentum of national government strategy trickles down to levels of local government, is adopted by tourism businesses, and is cooperated with by host local communities all in consonance to enhancing tourist satisfaction. This study is an interpretation of the principles of sustainability where society and the environment should not be sacrificed for mere economic gains and all stakeholders benefit to include future generations.

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