The sustainability of island destinations: Tourism area life cycle and teleological perspectives. The case of Tenerife

Juan Ramón Oreja Rodríguez*, Eduardo Parra-López, Vanessa Yanes-Estévez

Departamento de Economía y Dirección de Empresas, Universidad de La Laguna, Facultad de Ciencias Económicas y Empresariales, Campus de Guajara, 38071-La Laguna (Tenerife), Islas Canarias, Spain

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Abstract

Tourist destinations are in a state of continuous change. This development is more intense in the case of island destinations due to their geographic limitations. This paper considers the use of the tourism area life cycle model [Butler, R.W. (1980). The concept of a tourism area cycle of evolution: Implications for the management of resources. Canadian Geographer, 24, 5–12.] alongside a teleological model to explain the movement towards sustainability of an island destination in its maturity stage. The proposed model leads us to demonstrate how integrating strategic aspects of the teleological approaches can help to overcome some limitations of the life cycle model.

Ensuring the sustainability of natural, cultural, human and infrastructure resources is considered as a strategic objective. To achieve this aim, it is necessary to combine strategic decisions that are both internal and external to the island destinations.

The case study presented in this research is Tenerife (Canary Islands, Spain). Along with an analysis of the life cycle of this island destination, two types of strategic decisions are considered: the political–legal decisions of the regional government to regulate tourism activity and the decisions to regrade supply, developed by the administrative institutions related to tourism activity in Tenerife.

1. Introduction

Over the past decades, the tourism area or destination life cycle model (Butler, 1980) has let researchers and governments analyse the historical path and expected future development trends of coastal tourist destinations. However, the institutions involved are beginning to react to the social pressure that tourist crowding is causing (as illustrated by congested places, construction of infrastructures that damage natural resources, and the misuse of scarce resources like water) and many are now considering sustainability strategies to overcome these difficulties.

The purpose of this paper is to define a conceptual framework to integrate strategic plans for promoting the sustainability of island tourist destinations on the one hand, with, on the other, utilising the life cycle paradigm as a descriptive model projecting the destinations’ expected future evolution. In this way, an explanatory model of change in these destinations is proposed and the theoretical basis of this model will be described in the next section.

That model is then applied to a case study: the island of Tenerife (Canary Islands, Spain). The current situation was analysed by reference to the life cycle model (Butler, 1980). The current status is the result of changes in the destination, particularly those occurring during the past 15 years. Complementary to this model and in order to include strategic perspectives, political-legal decisions were also considered. In particular, plans from two levels of government have been included in the analysis: the regional level (Canary Islands region)—decisions to regulate tourism on the islands, and the island level (Island Council of Tenerife)—direct measures to reorientate the tourism supply.
2. Research objectives

This study attempts to explain the development towards sustainability of an insular coastal destination based on the previous theoretical literature. Most of the research explains tourist destination evolution through the application of the tourism area life cycle model (Butler, 1980). This perspective highlights the importance of long term planning and control to maintain the competitiveness of the destination but it is essentially a descriptive model. To overcome this limitation, others approaches are needed as discussed below.

This paper has the following specific objectives:

1. To propose and develop an integrated model to enable sustainability as a strategic plan or decision making process in a mature destination.
2. To use the example of one of the leading tourist destinations in Europe, Tenerife (Canary Islands) to illustrate the applicability of the proposed model.

3. Evolutionary models of coastal destinations

3.1. The life cycle model (Butler, 1980)

The evolution of island coastal tourist destinations can be explained using benchmarking analysis and, thus comparing destinations with others as well as with its own situation in earlier periods allows an interpretation of their development. In this context, and following Van de Ven and Poole (1995), the change will be discussed using empirically observed differences in form, quality or conditions over time.

Several models have been used to describe the evolution of tourism destinations. One of the first was presented by Christaller (1963) with a model of artists as people finding quiet new areas for inspiration. Plog (1973) identified three kinds of tourists (allocentric, midcentric and psychocentric) whose psychology and preferences conditioned the rise and fall of destinations. However, the most widely accepted and discussed model was proposed in 1980 by Butler which represented an adaptation of the life cycle model to the destination context. In the longitudinal analysis, changes in tourist destinations have been considered as elements of the different stages they pass through in time. The life cycle model (Butler, 1980) proposed a hypothetical evolution of a tourist area, and suggested that destinations pass through six stages (Exploration, Involvement, Development, Consolidation, Stagnation, Decline and Rejuvenation), each with specific characteristics.

Many of the case studies in which the model has been applied can be characterised as mature destinations, and predictably the stagnation phase has received the most attention (Lundtorp & Wanhill, 2001). Because of the wish to avoid the fatalistic path shown by the model, restructuring and rejuvenation strategies have also been the focus of some papers. For example, Agarwal (1997) discussed the links between the life cycle (Butler, 1980) and the restructuring thesis. The premise that decline will continue until corrective measures are developed is implicit in both constructs (Agarwal, 1997). While the life cycle describes the features and problems to be solved at this stage, the restructuring perspective presents a sum of strategic options to overcome the difficulties of stagnating visitation rates.

Two decades later, Butler (2000) revisited his model and highlighted aspects about it that could explain its continued relevance since 1980. He argued that because of a focus on detail in many studies some key aspects and the overall validity of the model had sometimes been overlooked. In order to explain the growth, change, limits and intervention in a tourism area, the model is based in eight elements (Butler, 2000):

- **Dynamism**: one of the most characteristic features of tourism activity.
- **Process**: the change in tourism areas is a process of development that could be modelled.
- **Capacity or limits to growth**: the model is based on the idea that if visitors exceed the capacity of the destination, the quality of visitor experience would decline. The difficulty in measuring the capacity has attracted many criticisms (Weaver, 2000).
- **Triggers**: factors which cause change in the destination such as innovations.
- **Management**: emphasised in terms of its importance for the destination as a whole because many destinations are not managed although individual resources and facilities often are.
- **Long term viewpoint**: it is crucial to avoid decline by looking forward from the beginning.
- **Spatial components**: the proposition was that as development at a specific destination stagnated, there would be a spatial shift of development to a new nearby location and a new destination begun.
- **Universal applicability**: the model was designed to be applicable to all tourist destinations.

Over time, this model has attracted many theoretical and applied examinations (Butler 2006a,b, Cooper, 1990, 1992a,b, 1994; Digance 1997; Tooman, 1997) as well as being subject to constant revision and critique (Agarwal, 1997, 1998; Oppermann 1995, 1998). Lundtorp and Wanhill (2001) formulated a demand-generated explanation of the life cycle model and the mathematical processes and this model support Butler’s (1980) theory and (along
with Berry, 2006) make it possible to mark when the stages of the resort cycle occur.

The cycle model has also been subject to modifications (Butler 2006a). For example, Agarwal (1994) emphasised the importance of the choice of the unit of analysis and proposed the application of the model to each single product in the destination as each one could experience its own cycle.

In some papers, e.g. Hovinen (2002) in Lancaster County, although the model does not fit the case study well, the author still defines the model as useful for describing and interpreting the situation in his destination. Hovinen confirms that the destination has the potential to go into the decline stage if the appropriate management decisions or planning are not made.

Given the requirement for statistical data over a long period of time, the theoretical validation of the destination life cycle model (Butler, 1980) has tended to be concentrated in island coastal destinations. See, for example, the work of Choy (1992), Cooper and Jackson (1989), Debbage (1990), Douglas (1997), Foster and Murphy (1991), Ioannides (1992), McNutt and Oreja (1996), Meyer-Arendt (1985) and Weaver (1990). Of particular relevance, the work of McNutt and Oreja (1996) took place in the Canary Islands (Spain).

3.2. Teleological component to explain tourism development

Tourist destinations could be regarded as having, within themselves, a prescriptive change process or an internal logic that the life cycle seems to expose. Thus development and change should be capable of being predetermined. However, changes in tourism destinations can also be influenced by other elements including the environment (geographic, economic, political and social variables), the ideologies and beliefs of the groups and individuals in the destination, the available resources, past results and proposed objectives or strategies as well as chaos and random events (Russell 2006).

For this reason, an explanation of change in destinations should incorporate other elements in addition to the concept of the life cycle. These other components would allow institutions to make appropriate decisions both from the perspective of the situation of the island coastal destinations and from the desired state of sustainability.

Related to this idea, the life cycle model of Butler (1980) highlights and emphasises the crucial importance of management and control to overcome and avoid potential difficulties. However, it is necessary to look for other elements in other models as the life cycle primarily describes the situation and the problems at each stage. The perspectives that could reveal these missing elements are combined in this paper in the teleological model. Instead of defining the destination as being subject to prescriptive change, this approach considers that the evolution of the destination is conditioned by a range of variables including institutional decision making, objectives, strategic planning and social construction. The combined effect of all these elements influences the internal logic of development inherent in each destination. This is illustrated in Fig. 1 as “Change by construction” as opposed to the “prescriptive change” that characterises the life cycle model (Butler, 1980).

3.3. Weaver (2000) and sustainability

Weaver (2000) proposed a different but complementary model to the life cycle paradigm (Butler, 1980). His model considers Butler’s stages as just one possible scenario within his framework. It captures the need to regulate the use of tourism resources—especially the environment—in order to adjust the flow of tourists. What is needed in addition is the inclusion and explanation of the concept of sustainability so that this can be incorporated into the evolution of coastal destinations.

In situations where a high degree of regulation occurs, Weaver (2000) proposed that a destination could adopt “deliberate alternative tourism (DAT)”, related to two forms of mass tourism, and to the sustainability of the destination. The first form he calls: unsustainable mass tourism (UMT), and that, as predicted by Butler (1980), is the logical result of the continued development of the tourism that, in absence of restrictive regulation, exceeds the carrying capacity and the environmental and

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![Fig. 1. Model of sustainability of insular coastal destinations. Source: The authors.](image-url)
sociocultural limits of acceptable change in a destination. The second form: sustainable mass tourism (SMT) at a destination, in theory, exists where a high intensity of tourism exists, but with high regulation and limitation of carrying capacity. To move from the first to the second of the two scenarios would require modification of the flows of mass tourism that occur in a destination with a higher than normal level of control exerted by authorities. These controls might include the retention of key customers through yield management strategies, also involving the continuous redevelopment of infrastructure and local facilities and activities, in order to move towards sustainability (Weaver 2000). In such a situation, the tour companies that control mass tourism to tourist destinations, are positioned far better to influence such changes and could collaborate more with local companies to facilitate sustainable practices. Given resulting internal economies, such developments might allow for the re-allocation of resources to enable more appropriate interventions and educative programmes that would help establish more efficient practices of recycling and better landscaping (Clarke, 1997; Goodall, 1992).

In the transition from the UMT to SMT tourism proposed by Weaver (2000) one of the main forces driving the tourism development is the support of the stakeholders. The interrelationships between stakeholders could explain much tourism development conflict (Markwick, 2000). Each group has different characteristics and philosophies (Needham & Rollins, 2005) and they seek to achieve their own interests and objectives. This process results in a complex network of influences in many directions and perspectives. Tsaur, Lin and Lin (2006) developed a model for evaluating ecotourism sustainability in which they identify the main stakeholders and the interrelations among them according to their economic, social and environmental perspectives. In the next section, we include examples of these influences and stakeholders in our case study, (Tenerife), thus adding another case to the examples proposed by Weaver in 2000. (The Mallorcan Municipality of Clavía and Jersey).

3.4. A proposed integrated model to the sustainability

The life cycle model (Butler, 1980) emphasises the importance of control and responsibility in managing the destination, presenting a descriptive approach to this situation and offers a list of problems to be solved, arguing for “prescriptive change”. Thus it becomes a heuristic tool that explains the development of an island coastal tourist destination but it does not present in detail the strategic options needed to overcome situations. However, the model emphasises the need for proactive and strategic planning and provides guidance for strategic decision making (Buhalis, 2000). These elements must be found in other models that complement the life cycle.

One of the most common criticisms of the life cycle model is that it suggests the existence of an inevitable process which seems to limit or deny the possibilities of intervention (Cooper, 1994; Haywood, 1992). Thus, the life cycle model cannot fully explain the support sustainability that it is quite commonly seen in many destinations as a way to overcome the stagnation period. Sustainability should be explained from a composite viewpoint that includes the life cycle model, that adds some elements of prescription and natural change, and also includes planned, created and managed change from the teleological perspective. This is the basis of the explanatory model proposed in this paper (Fig. 1) that is examined in the context of Tenerife. It assists in the analysis of change towards sustainability in island tourist destinations and gains support from the definition of sustainability.

Traditionally, tourism sustainability is seen as a set of principles, political prescriptions and management methods that establish a path to develop tourism in conjunction with the protection of environmental, cultural and infrastructure resources of tourist destinations for the future (Lane, 1994). From this position, Hunter (1997) sees sustainable tourism as an adaptive paradigm depending on the circumstances of the environment in which it develops. He proposes four alternatives:

1. **Sustainable development through a “Tourism Imperative”:** this is a very weak interpretation of sustainable development where the development of tourism is centred on satisfying the needs and desires of tourists and tour operators. It is justified where tourism activity represent a real improvement and creates well-being for more people.

2. **Sustainable development through “Product-Led Tourism”:** this is also presented as a weak interpretation of sustainable development because it is secondary to the main need to design new and maintain existing tourism products.

3. **Sustainable development through “Environment-Led Tourism”:** this alternative promotes types of tourism which rely on the maintenance of a high quality natural environment and/or cultural experiences.

4. **Sustainable development through “Neotenic Tourism”:** this is based upon the notion that tourism will always have environmental impacts and it tries to protect as far as is feasible the functional integrity of natural ecosystems.

Of these four alternatives, “Sustainable development through Product-Led Tourism” is the focus here. This alternative matches the experience of island tourist destinations in this case study (Tenerife) as it coincides with the development viewpoint adopted by key institutions on the island. Bianchi (2004) reinforces this idea because he perceives that the principles of sustainability as outlined in the tourist laws in the Canary Islands are what he describes as merely “technical solutions” to complex issues. This is also the view in the work of Morgan (1991) as subsequently revised by Aguiló, Alegre, Caldera, and...
Sard (2002). In these destinations, environmental aspects may receive substantial consideration but the main need is perceived to be to maintain the development of the current tourism product (sun and beach) or new alternatives, given the importance of tourism to the local island economy. Environmental concerns centre on measures aimed at reducing the damage caused by tourism and improving the resources already in use, as well as limiting the use of resources not yet linked to the sector.

In short, in order to surmount the prescriptive limitations of the life cycle model when establishing the objective of sustainable development in island destinations, the teleological model proposed here can be used in a complementary manner. This embraces a series of constructive theories (Van de Ven & Poole, 1995), notably: social construction (Berger & Luckmann, 1966), decision-making (March & Simon, 1958) and setting objectives and strategic planning (Chakravarthy & Lorange, 1991).

4. Case study: Tenerife (Canary Islands)

The proposed model (Fig. 1) is applied in Tenerife one of the major European tourism destinations. This destination is moving towards sustainability as a means to overcome its maturity and stagnating tourism arrivals (prescriptive change). That sustainability is the result of a teleological perspective (strategic plans, decision making and objectives) driven by two main considerations: Canary Islands tourism restructuring and the specific strategic priorities for Tenerife development. In this section, after the main geographical and economic features of Tenerife are briefly outlined, we comment on externalities as a consequence of the stage in the life cycle model and as a justification for the move towards sustainability. Following this, the two sources of strategic decision making are outlined: one from the regional government (Canary Islands) and the second from the island authorities (Tenerife).

4.1. Tenerife: a tourism destination in the global context

The Canary Islands are a group of seven islands of volcanic origin which make up an autonomous region within the Spanish state. Tenerife is the central island of the group, which is located in the Atlantic Ocean, west of the African continent, some 1000 km from the Iberian peninsula. Tenerife is also the largest island of the archipelago (2026 km²) with the rough shape of a pyramid with a triangular base (Fig. 2). The island climbs from its rocky coasts towards the centre, reaching its maximum height in Teide Peak (3718 m), the highest point both in the Canary Islands and in Spain.

The island has a number of distinctive climatic regions, from the sunny beaches of the coastal areas to the snows of Teide. The trade winds help to distinguish the north from the south, in terms both of humidity and temperature. The island is blessed with some beautiful scenery, including Teide National Park, the laurisilva forests, ravines and volcanic terrains. Combined with the agricultural land and rocky coasts on the one hand and extensive sandy beaches on the other, Tenerife is a striking amalgam of landscapes. The climate of the island is, along with its natural resources, its main tourist attraction for the sun-and-beach product, with very little seasonal variation throughout the year.

Studies carried out by bodies such as the Island Council of Tenerife, and the Governments of both the Canaries and the Balearic Islands, stress that Tenerife’s main competitors are, in winter, the other Canary Islands and to a lesser extent, because of the distance involved, the Caribbean Islands, while the competition widens in summer to include destinations in the Mediterranean and the Caribbean.

The growth of Tenerife’s population has been significant in recent years, owing to its attraction to tourists, climbing from 665,611 inhabitants in 1996 to 799,889 in 2003. This amounts to an increase of 20.17% and the island now houses 42.20% of the entire population of the Canaries (2003). With a population primarily of European origin, Tenerife has a density of 394.81/km² in 2003 and is the most populated island in the archipelago (ISTAC). The growth in population has been mirrored by the growth of tourism in the Canary Islands generally, which has almost doubled in the past eight years, at a rate faster than all but one of its major competitors (Table 1).

The tourism development of the island has followed a fairly conventional model of mass tourism based on the sun and beach product. Growth in the various coastal destinations in Tenerife has been uneven. The island-aggregate growth of tourism has been strongly driven by the performance of the southern tourism zone (Arona–Los Cristianos/Adeje–Las Américas), while the north (Valle de La Orotava–Puerto de la Cruz) has been experiencing stagnation in recent years. The other coastal destinations on the island (Santa Cruz de Tenerife/La Laguna and Tacoronte) have not developed significantly in terms of tourist arrivals.

4.2. Tenerife tourism model and its sustainable development

Figs. 3 and 4 illustrate the evolution in number of tourist visits to Tenerife over the past 15 years. Zones 1, 2 and 3² (Santa Cruz de Tenerife/La Laguna and Tacoronte/Valle de La Orotava–Puerto de la Cruz) have barely contributed to growth in recent years, while Zone 4 (Arona/Adeje) has driven the overall growth in the number of visitors to the island. Thus maintaining the current level of visitors to Tenerife is strongly dependent on the performance of Zone 4 (Arona/Adeje).

This model of mass tourism has generated impacts on the natural resources of the island (McNutt & Oreja, 1996).

² The zone numbering refers to the classification system used by the Technical Service of Economic Development of the Island Council of Tenerife, in order to provide more instructive statistics on inbound tourism on the island (see Fig. 2).
The coast has been affected by successive stages of building development linked to the tourism sector, including the building of hotels, apartments and residential areas (including second homes).

Urban development has been accompanied by aesthetic contamination with noise pollution; problems with waste and residual water, the disappearance of the traditional local architecture, as well as the development of a road infrastructure impacting on the scenery of the area (see Bianchi, 2004). In addition, there are a number of industrial installations on the coast, including an oil refinery and an electricity power station. As well, the island authorities are currently studying the possible construction of a “super-port” in an industrial zone, near the Reina Sofia International Airport, which would be relatively close to one of the largest natural beaches in the south of the island (El Médano). This is opposed by ecological groups and many citizens but has

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the support of the local authorities. The likely impact of this new infrastructure project is unclear. The ecological groups predict that this will result in considerable natural damage while the authorities emphasise that it is one of the ideas that takes into account environmental concerns and responds to the needs of zoning and to the future development of the island. Its location so close to important natural tourist resources raises legitimate concerns about its aesthetic impact on the island’s appeal to visitors.

By tracing the evolution of the number of hotel and non-hotel tourist beds made available over the past 15 years (Figs. 5 and 6) we can see clearly the building pressure in Zone 4 (Arona/Adeje) and the zone’s contribution to the overall number of beds on the island. By contrast, zones 1 and 2 are of little relevance, while Zone 3 has practically stagnated.

Consideration of the above patterns has generated a socio-political debate at regional and island levels about whether it is wise to maintain the current model of tourism growth, given the degree of maturity in the sector with the growth in island tourism depending solely on the continued evolution of the southern zone.

With respect to the role of different stakeholders in the debate about sustainability, in Tenerife it is possible to identify some of the influences noted by Tsaour et al. (2006). In Tenerife, it could be said that the actual tourism model of development results from pressure from the construction sector which is one of the main stakeholders in tourism. The new tourism infrastructure provides economic benefits...
for the local public administrations (municipalities) and is both a source and a rationale for asking for funds for further infrastructure developments such as ports, motorways and cultural facilities. For the local communities, in the early stages of development, tourism represents employment, new infrastructure (for example, airports, railways, better communication with the continent and improvement in beaches) and social benefits from the cultural development. However, at a certain level saturation arrives and, what are at first benefits then become disadvantages illustrated by overcrowded beaches, traffic jams and damage to unique scenic areas. This is why residents have begun to discuss the need to establish some measure of carrying capacity in order to mitigate the undesired effects of continued mass tourism expansion. This pressure from the local community on the public administration for regulation is often supported by the hoteliers. Their objective is generally to obtain an increase in prices as a result of the decrease or limitation on the accommodation available which is experiencing constant demand. This is why established accommodation providers are in favour of regulation to control the number of new beds. Tourists themselves also play an important role in development as they desire modern infrastructure but at the same time, low prices and unique offerings. Finally, the ecologist groups, as a tourism stakeholder, also promote regulation as their policy is to preserve the environment from any kind to damage, such as that resulting from the mass tourism development, noted above.

The other islands in the Canary archipelago are involved in similar debates depending on the phase of the life cycle which their resorts have reached. As a result of this pressure from the stakeholders on the public administration, the regional authorities have adopted strategic decisions on specific topics. The stated primary goal is the sustainability of tourism development in the whole region, and this has resulted in specific measures being adopted by each of the individual islands (see below).

4.3. Tourism restructuring and sustainable development in the Canaries

A recent study by Villar (2003) points out that from the early 1960s to the late 1980s the Canary Islands have applied similar measures to the promotion of the tourism industry to those that have been applied in the rest of Spain. The primary aim was to improve the resources, infrastructure and facilities of those resorts that were
expanding or liable to development. The idea was to establish the foundations for growth based on the interpretation of Butler's (1980) model.

The legal instruments used for planning this growth process were the so-called “Tourism Regulation Plans”. These plans controlled the type of establishments that could be built, as well as related facilities and services. Along with these plans, “Urban Regulation Plans” were designed, which established the limits and nature of development on which tourism would be founded.

However, the growth in the tourism sector, and its maturity in some areas, created serious concern that the resources of the islands might become exhausted. Thus, political initiatives were undertaken, resulting in changes in the political—legal environment. These initiatives tried to slow tourism expansion and channel development into a more sustainable process, seeking a balance between tourism-driven economic development and the rational and appropriate utilisation of resources. In this context laws were enacted referring to rural areas (1987) and natural spaces (1987), resulting finally in the Canaries Tourism Law (1995).

Nevertheless, these measures and their implementation proved inadequate to control the apparently unstoppable growth in tourism on the islands, so the regional government next set a goal of sustainability, adopting a policy similar to what Hunter (1997) calls “Sustainable Development through Product-Led Tourism” as noted earlier. From the political—legal perspective the strategic decision was taken to suspend practically all further tourism initiatives, with a view to achieving more successful regulation of tourism activity on each of the islands.

The measures that have been established by these later regulations have suspended further building and applications for planning permission in the tourism sector. Exceptions to these regulations exist including the case of rural tourism developments, the rehabilitation or substitution of tourist establishments which do not involve increasing accommodation capacity, establishments such as restaurants in classified buildings and, finally, city hotels catering primarily to business visitors.

Exceptions have also been made with regards to four and five star hotels. In the case of four-star hotels, these can be built if they have their own complementary facilities, such as golf courses, marinas, theme parks, sports or health facilities. Five-star hotels can be built if they comply with the regulations that specifically apply to them. These exceptions are designed to act as “entry barriers” to filter the kind of tourists arriving to the island. With these measures the authorities are seeking to reach specific objectives, namely, positioning Tenerife to attract a more up market type of tourist and further the island’s sustainable development profile. The rationale is that Tenerife will be chosen by people with a high income level prepared to pay for higher quality (4 and 5 star) hotels and related facilities. Related to this is the idea that if the number of tourists arriving is reduced or contained, there is likely to be a consequential decline in the use of resources and reduced need for further infrastructure development.

To achieve or move towards sustainable development requires a construct capable of providing an indication of the progress achieved: in this case the concept of carrying capacity has been adopted and in line with Mathieson and Wall (1982), Law 19/2003\(^3\) (Chapter IV, Directive 25) has defined this as “the set of factors that permit the tourist use of an area without leading to an unacceptable decline in the experience of the visitors, an excessive pressure on the tourism resources of the area, an unacceptable ecological, territorial or scenic disturbance, or an excessive effect on the resident society, and having available the general facilities, services and infrastructures required for the development of the activity and the population of services demanded”.

This notion of carrying capacity has been established for each island and for the various zones within the individual islands. There are certain areas in which no tourism growth is allowed at all, since these areas are deemed to be saturated because the supply already exceeds the estimated demand. However, the political bodies of the islands have found it difficult to specify the measurement of the carrying capacity (Villar, 2003), given that carrying capacity, as specified in the current regional legislation, consists of a number of specific complex elements comprising: the ecological, social, scenic, infrastructure, and market capacities, the availability of technological, professional and manpower resources, and the stock and evaluation of tourist and natural resources.

Every 3 years an appropriate rate of growth is determined for accommodation capacity, and a contract award system has been established. This operates either by chronological order of the request being received or by public invitation to tender. For example, for 2003–2006 (Villar, 2003) the following rate of growth was agreed:

- In Gran Canaria, Tenerife, Fuerteventura y Lanzarote, the license for new tourist establishments is suspended, with the exceptions of city hotels, cases of restoration without increasing capacity and the projects with a license granted before January 2001, allowing for between 50 000 and 90 000 new beds.
- In the “green islands”, El Hierro, La Gomera y La Palma, an annual increase of 200, 1100 and 1750 beds, respectively was to be allowed.
- For the period 2003–2006 licences for new building in Tenerife have been suspended (Government of Canary Islands, 2003). This excludes the building of urban hotels, the renovation of hotels without increasing accommodation capacity and those projects that received their licences prior to 1 January 2001.

By imposing these limitations, the aim is to establish a sustainable tourism development model that is acceptable

\(^{3}\text{http://www.gobcan.es/juriscan/ficha.jsp?id = 42955/idispafec.}\)
to stakeholders while not exceeding the carrying capacity of the islands. Licences for new accommodation development can be approved when they do not lead to irreversible damage to the natural resources of the islands (Government of Canary Islands, 2003).

In this way, the changes in the political–legal environment have been crystallised in the enactment of the above mentioned Law 19/2003, on 14 April 2003, through which the General Regulation Directives and the Canary Islands Tourism Regulation Directives were approved, with the aim of achieving “a more sustainable and long-lasting model of development for the Islands, especially respectful to the environment, the cultural and territorial heritage, but at the same time be socially more balanced and fair, as well as generative of economic wealth”.

However, the moratorium has not stopped or even reduced the increasing number of beds in the Canary Islands. The opposite has happened: the number of beds has increased during the last years and the pressure of constant demand, also. This supports our argument that a model and regulation alone are not capable of moving a tourism destination towards sustainability. The teleological component noted earlier and the strategic actions appear critical and key components in achieving such an effort.

### 4.4. Strategic direction for tourist development in Tenerife

The proposed model, would however, be incomplete if it did not incorporate the complementary measures undertaken by the bodies responsible for tourism management at the island level (Fig. 7). This reveals the complementarities of the life cycle model and the teleological paradigm. The objective being to build a new tourism framework, on the basis of the product on offer (Hunter, 1997). This complementary approach is developed in the context of a set of strategies aimed at redefining tourism in Tenerife, which include improving the supply in the various tourism zones on the island, adapting to the evolution of the tourism sector and reflecting the type of customer and market attracted. In this way, the island should gain a competitive advantage that is difficult to imitate: the unique experience of a holiday in Tenerife is an intangible product that cannot be copied by any other destination (SPET, 1999/2002).

In order to attain a competitive advantage, strategies have been designed by the public entity responsible for tourism management in Tenerife: the Official Tenerife Tourist Board (SPET, using its Spanish initials), whose stakeholders are the island administrations (Island Council of Tenerife and municipalities) and the private sector, represented mainly by ASHOTEL (Association of Hoteliers and Non-Hoteliers of Tenerife, La Palma, La Gomera and El Hierro), and other businesses associated with the hospitality sector. SPET has been carrying out this consultation activity since its creation more than 10 years ago.

The first group of strategies developed by SPET has the aim of improving the quality of the tourism supply in Tenerife. This is reflected in the development of brands and zones. Thus, as far as brands are concerned, the following are now being promoted: Tenerife Golf, Tenerife Select, Tenerife Natural, Tenerife and the Sea, Tenerife Convention Bureau (TCB) and Tenerife Film Comission (TFC).

**Tenerife Golf** has the objective of creating awareness in this market segment about the supply of golf courses in Tenerife (Fig. 7). This reveals the complementarities of the life cycle model and the teleological paradigm. The
Tenerife, as well as about the hotels and apartments associated with this brand, with a view to building customer loyalty (SPET, 1999/2002). Tenerife Select was created as a club combining the most exclusive tourism facilities on offer on the island, directed solely at customers with high spending power. The brand Tenerife Natural, created in 2000, tries to promote rural areas and nature activities in Tenerife. Tenerife and the Sea began its activities in 2000, and aims to promote Tenerife as a destination for maritime leisure. In 1993 the Tenerife Convention Bureau (TCB) was created, in order to promote Tenerife nationally and internationally as a destination for congresses, conventions, product presentations and incentive holidays. Tenerife Film Commission (TFC) was created in 2001, with the aim of promoting the island as a location for the production of audiovisual products. It set up a one-stop contact to help visiting filmmakers find locations, obtain permission to film, and make arrangements with specialised assistance from local firms (such as audiovisual producers, hotels with services designed for filmmakers, modelling agencies, firms hiring specialised vehicles and specialists in aerial shots).

A second strategic approach adopted by the island administration has the aim of specialising supply by zone (SPET, 1999/2002). This has led to changes in the traditional zone structure of tourism in Tenerife. Thus, the northern zones of Tenerife, Valle de La Orotava, Isla Baja, Santa Cruz-La Laguna and Bajamar-Punta de Hidalgo, have been re-defined, each providing a distinctive supply within the overall destination of Tenerife. In the last zone above an Improvement Plan designed to improve the resources and infrastructure has been established.

The tourist destination Sur de Tenerife has plans to modify its supply. This zone, which dominates the overall model of growth of Tenerife in terms of the number of tourists (as noted earlier), has implemented a Tourist Destination Improvement Plan since 1999. This is focused on improving the urban and natural areas of the zone Los Cristianos-Costa Adeje, and amplifying and improving spaces for public use and public services while also increasing the latter services. This Improvement Plan has been financed by the Island Council of Tenerife and the municipalities of Adeje and Arona.

The “Plan for Sur de Tenerife” was in operation for the period 2001–2004, managed by SPET and funded with 9 m euros from the Spanish Ministry of Economy and Finance, the Regional Government of the Canary Islands, the Island Council of Tenerife and the municipalities of Adeje and Arona. Its objective was to improve the tourism infrastructure in this zone in the south of the island.

Another zone, Valle de La Orotava, was defined as a tourism zone in 1998 with the aim of providing the valley with its own brand image or identity, reinforcing its position as a multi-destination of beaches, and developing the main segments of its supply. It has been presented—mainly in the UK market—as a discovery destination, a mysterious valley of great diversity, natural beauty and cultural tradition (SPET, 1999, 2002).

Finally, the Isla Baja brand comprises the north east zone of Tenerife, with villages such as Garachico, Los Silos, El Tanque and Buenavista. The first step was the agreement of a consensual Tourism Model (2001), subsequently followed up by initial measures laying the foundations for its implementation (2002).

5. Conclusions and implications

Efforts to integrate the two perspectives of tourism analysis have been undertaken in this paper. The Tourism Area Life Cycle model with a focus on product, and the Teleological Model with its focus on strategy, have been considered in this study. Both perspectives are synthesised in the model presented (Fig. 1), and represent a strategic integration of key aspects of tourist management in Island Destinations.

The Life Cycle model cannot explain the movement towards sustainability that is so commonly sought in many destinations and that is considered as a strategy to overcome stagnation. It is evident; therefore, that sustainability must be explained through a combination of more than one model, as discussed above.

The end result of the adoption of sustainability strategies must include measures for the conservation and protection of the environment, as well as land use planning in general. If these strategies are to have a positive impact on the environment, they must incorporate a regulatory framework in relation to the environment. Such moves have not yet been completed in Tenerife although moves in the right direction have been taken, including the law 19/2003 of the Government of the Canary Islands (noted earlier), as well as strategies relating to architectural control. No law can be passed, without the consensus of all those involved, since without such consensus, only fragmentation will result. This is one of the implications, our model emphasised the need to put into practice, not only laws, but to decide the strategic management of the destination bearing in mind the different stakeholders interests and trying to share the same objectives. It seems not easy at all.

This review of Tenerife, has allowed us to recognise the relevance of the problems identified in the earlier discussion, that relate to strategic operations in the island, concerned with tourist activity, excess of supply, imbalances in demand, lack of consensus in environmental matters and problems of security. These problems have taken the island to its present phase of stagnation. This is a critical position, and also serves to highlight the necessity to combine sustainability principles within an appropriate framework in order to develop a solid and coherent approach to the management of Island Destinations, in line with the opinions of key authors in this field (Agarwal, 2001; Buhalís, 1999; García Falcón & Medina Muñoz, 1999).
Finally, the findings in relation to the Island of Tenerife, can serve as an example for other Insular Destinations, notably in terms of a response to experiencing the later stages of the Life Cycle Model. The Canary Islands are currently focusing their efforts on a strategic response to potential stagnation. Before dealing with sustainability, we must first evaluate the fundamental principles of the future development of each tourist destination (for example, in terms of rural demography, economy, and development potential). This enables an analysis of the interrelationships between the different strategies and the desired objectives, and to measure the negative impacts as well as the positive ones of such responses.

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