# TOURISM MATURITY IN ARUBA



## Tourism maturity in Aruba<sup>1</sup>

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# Abstract

This paper explores the tourism life cycle in Aruba by looking at, among others, the number of visitors, hotel rooms, and visitor spending. The tourism sector has been the primary pillar of the Aruban economy for over thirty years, and is likely to stay so for the coming years. Over the years, activities related to tourism evolved significantly, shaping the quality of life and intensifying the usage of scares natural resources. The question is: in which stage of the life cycle is the tourism sector of Aruba currently?

This paper attempts to answer this question through the widely used framework for determining the tourism evolutionary pattern, the concept of 'tourism area life cycle' (TALC) of Butler (1980). Moreover, in the paper the method proposed by Haywood (1986) to operationalize the TALC concept, distinguishing between the growth stage, the consolidation stage, the stagnation stage, and the decline stage has been applied. Z-scores for the percentage changes in several tourism indicators are estimated and compared with Haywood's benchmarks to determine the current development stage of the tourism sector in Aruba.

The majority of the indicators analyzed suggest that tourism in Aruba has reached the stagnation stage. However, it does appear that the sector has not yet reached the tipping point from which it would start to decline.

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## 1 Introduction

This paper explores the tourism life cycle in Aruba by looking at, among others, the number of visitors, hotel rooms, and visitor spending. The tourism sector has been the primary pillar of the Aruban economy for over thirty years. During this period, this sector has seen a large amount of investment in the local infrastructure and in tourist facilities, i.e., hotel rooms, restaurants, and other ancillary services, as well as an expansion in airlift. As a result significant developments can be observed in this sector in terms of the number of rooms, visitors to the island, and spending by these visitors. The question is now: how much more can the tourism sector grow? In other words, from the tourism life cycle perspective, in which stage is the tourism sector currently?

This paper is organized as follows. Section 2 discusses the theory of the tourism life cycle. Next is the application of this concept to Aruba in section 3, presenting an overview of the developments of several tourism indicators. Lastly, section 4 provides some concluding remarks and possible policy implications.

## 2 The concept of tourism life cycle

According to the literature, tourism develops in several stages. Noronha (1976) states that "tourism develops in three stages: i) discovery, ii) local response and initiative, and iii) "institutionalization". It has also been suggested that the types of tourists that are attracted to a tourist area change when the area evolves (Christaller, 1963; Plog, 1972). In the beginning, the area will be attractive to a small number of visitors seeking adventure, followed by increasing numbers of visitors as the area becomes more accessible, better serviced, and well-known. Finally, the area will appeal to declining number of tourists, as it becomes older, more outdated, and less different in comparison to the areas where the tourist come from. Thus, over time as the destination becomes more popular and more commercialized, it loses its qualities which originally attracted tourists.

According to ECLAC (2008), one of the most widely used framework for determining the tourism evolutionary pattern is the concept of 'tourism area life cycle' (TALC) of Butler (1980). This framework is based on the product cycle concept. In this concept, the sales of a product proceed slowly at first, then experience a rapid rate of growth, stabilize, and subsequently decline (Butler, 1980). Tourism as a product passes through similar stages. Specifically, the TALC comprises a total of six possible stages (see also Figure 1). Though the S-shape pattern shown in Figure 1 is the most known life cycle pattern, Butler (1980) notes that not all areas experience the stages as clearly as others. Moreover, Haywood (1986) argues that the S-shape pattern is only one of many possible empirical patterns.

#### Figure 1 Tourism life cycle



Source: Butler (1980).

The following explanation of these stages is based largely on Butler (1980):

- Exploration stage, is characterized by a small number of tourists making individual travel arrangements and following irregular visitation patterns. They can be expected to be non-local visitors who have been attracted to the area by its unique natural and cultural features. During this stage there is a high use of local facilities and contact with local residents, which may itself be an attraction to some visitors. Physically and socially the area is unchanged by tourism, and the arrival and departure of tourists are of relatively little significance to the economic and social life of the permanent residents.
- 2. Involvement stage, is when some local residents begin to provide facilities primarily or even exclusively for visitors, as their numbers increase and assume some regularity. There is still a lot of contact between visitors and locals, and this contact actually increases for those locals involved in catering to tourists. During the progression of this stage, advertising specifically to attract tourists will begin to occur, and a basic initial market area for visitors can be defined. A tourist season can emerge and adjustments will be made in the social pattern of at least those local residents involved in tourism. Tourist travel arrangements become more organized, and the first pressures are put upon government and public agencies to provide and improve transport and other facilities for visitors.
- 3. Development stage, reflects a well-defined tourist market area with heavy advertising. During this stage, local, small-scale involvement and control of development decline rapidly and locally provided facilities are superseded by larger and newer facilities provided by external organizations. In peak periods, the number of tourists equals or exceeds the permanent local population. During this stage, the destination will make use of imported labor, auxiliary facilities for the tourist industry will begin to appear, and the type of visitor changes.
- 4. Consolidation stage, is when a declining rate of increase in numbers of visitors is observed, although the total number of visitors still grows. Also, total visitor numbers exceed the number of permanent residents. A significant part of the area's economy is now linked to tourism. The marketing and advertising are wide-reaching, and efforts are made to extend the visitor season

and market area. Also, during this phase some discontent can appear among permanent residents, especially those not involved in the tourist industry in any way.

- 5. Stagnation stage, is when the peak numbers of visitors and the capacity levels for many variables have been reached or exceeded, and bringing environmental, social and economic problems. While the area has a well-established image, it is no longer in fashion, and there is a heavy reliance on repeat visitors, conventions, and similar forms of traffic.
- 6. Declining stage, is when the area is unable to compete with newer attractions and is facing a declining market. It loses its appeal to vacationers, and is increasingly used for weekend and day trips. During this phase, property turnover is high, and tourist facilities are often replaced by non-tourist structures, as the area moves out of tourism. Local involvement in tourism often increases at this stage, as residents are able to purchase facilities at significantly lower prices, due to the market decline. At the end of the declining stage, the area can become a tourist slum and/or lose its tourist function completely. On the other hand, *rejuvenation* may occur, although a complete change in attractions is required to achieve this.

Several studies apply various indicators for identifying the stage of a tourist area in the tourism life cycle. ECLAC (2008) uses the following indicators to identify the stage in the tourism life cycle of 32 member countries of the Caribbean Tourism Organization: i) the evolution of the level, market share and growth rate of stay-over tourists and cruise passengers, ii) the growth rate, market share and composition of source markets, iii) hotel occupancy rates and average length of stay, iv) the growth rate and market share of visitor expenditures per arrival, v) the growth rate and distribution of room supply, vi) the share of tourism in employment, exports and GDP. De Albuquerque & McElroy (1992) use, inter alia, the following indicators for identifying the tourism life cycle: i) stayover visitors (levels and change), ii) cruise passengers (level and change), iii) hotel rooms (level, change, per km<sup>2</sup>), iv) average daily visitor density per 1000 population v) average daily visitor density per km<sup>2</sup>, vi) per capita visitor spending, vii) average length of hotel stay, viii) percent of visitors staying in hotels, ix) number of hotels with 100+ rooms, x) hotel occupancy rates, xi) stayover market shares, xii) per capita promotional spending, xiii) ratio of cruise/population, and xiv) a simple index of seasonality. <sup>4 5 6 7</sup>

Moreover, Haywood (1986) proposes a method to determine the stage in the tourism life cycle, whereby he distinguishes between the growth stage, the consolidation stage, the stagnation stage, and the decline stage. Therefore, his growth stage encompasses three stages of Butler's tourism life cycle, i.e., the exploration, involvement and development stage. He suggests to plot the changes in the number of tourists from one year to the next as a normal distribution with zero mean. He proposes to classify tourist areas with percentage changes less than -0.5 $\sigma$  (where  $\sigma$  denotes the standard deviation) as being in the decline stage, tourist areas with percentage changes greater than 0.5 $\sigma$  as being in the growth stage, tourist areas with percentage changes between 0 and 0.5 $\sigma$  as being in the

<sup>&</sup>lt;sup>4</sup> The average daily visitor density per 1000 population is equal to [(visitor nights + number of cruise passengers)/(population/\*365)]/1000.

<sup>&</sup>lt;sup>5</sup> The average daily visitor per km<sup>2</sup> is equal to (visitor nights + number of cruise passengers)/( km2\*365).

<sup>&</sup>lt;sup>6</sup> The simple index of seasonality is the lowest among mature destinations and the highest among transitional areas (De Albuquerque & McElroy, 1992).

<sup>&</sup>lt;sup>7</sup> The simple index of seasonality is equal to the ratio of stayover visitors arriving in winter (December-May) to those arriving during summer (June-November).

consolidation stage, and tourist areas with percentage changes between  $-0.5\sigma$  and o as being in the stagnation stage (see Figure 2). Haywood (1986) mentions that the unit of measurement could be, besides the number of visitors, tourism expenditure, and measures such as market share or profitability. He argues that measures of market share or profitability are relevant, because:

A decline in tourist volume or tourist expenditure is not necessarily an indication that a tourist area has entered a stagnation or decline stage. Tourist volume may be down throughout a region or country and yet a given tourist area's share may be unchanged or even improved (p. 159).



Figure 2 Normal distribution of percentage change in the number of visitors with zero mean

Source: Haywood (1986).

## 3 The tourism life cycle: the case of Aruba

This section explores the tourism life cycle in Aruba. To this end, the level and growth rates of a number of indicators, such as the number of tourists (stay-over and cruise), the nights spent by tourists, the tourism receipts, the number of rooms, and hotel occupancy rates, are analyzed, and several density indicators, such as average daily visitor density per 1000 inhabitants and number of rooms per km<sup>2</sup>, are examined.<sup>8</sup> In addition, following the Haywood method, a Z-score is estimated for the percentage changes in several indicators. These are then compared with the benchmarks of -0.5 $\sigma$  and +0.5 $\sigma$  used by Haywood to determine the stage of the tourism life cycle in Aruba.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> Sources of information include CBA, CBS, World Bank (1986) and Croes (2000).

<sup>&</sup>lt;sup>9</sup> The Z-score is equal to  $(x - \mu) / \sigma$ , where x is the observation,  $\mu$  is the mean, and  $\sigma$  is the standard deviation.



 Data on visitor nights for the Venezuelan market are not available.

2) Period 1986-1990: data for the years 1989 and 1990.



1) For the period 1995-2017, the tourism exports deflator of the macro-economic model of the CBA is used to estimate real tourism receipts. For the period 1986-2004, the tourism exports deflator is approximated by the 12 month average CPI-inflation rate.

2) No data available for the period 1971-1985.



Stay-over and cruise tourists: level, growth rate, and visitor spending

Aruba's tourism sector does not consist only of stayover visitors but also includes cruise visitors. Figures 3 and 4 show the development in the number of stay-over visitors, cruise passengers, total visitor nights,<sup>10</sup> and tourism receipts. The total number of days spent on the island is approximated by the sum of visitor nights (excluding cruise passengers) plus the number of cruise passengers who usually stay only one day on the island. The growth rates in visitor nights plus cruise passengers are shown in Figures 5 and 6.

From the figures, it becomes clear that as of 1987 Aruba saw accelerated growth in the total number of tourism flows, especially in the period 1986-1990 when double digit growth rates were registered, e.g. Figures 6 and 7. The growth in total tourism flows decelerated in the 90's, followed by a prolonged period of steady growth. In recent years, the development in total visitors to Aruba has been heavily influenced by the Venezuelan tourism market, due to the socio-economic situation in that country. We observe that the negative average growth rate in the total number of tourism flows in the period 2016-2017 was related largely to the performance of this market, reflecting the effects of the travel and foreign funds restrictions implemented by the Venezuelan government. The number of Venezuelan

<sup>&</sup>lt;sup>10</sup> The visitor nights registered in Aruba are actually intended nights as indicated by tourists on the custom forms they fill out upon entry into Aruba.

visitors may have skewed the overall number of visitors, thus, not giving a true picture of the underlying trend of visitors.

Therefore, Figure 7 looks at total tourism flows excluding Venezuela (i.e., the sum of visitor nights excluding Venezuela plus cruise passengers). Comparing Figures 6 and 7, there seems to be no significant difference between the developments of total visitors. Moreover, compared to the late 1980s and early 1990s, growth in tourism receipts decreased in recent years (see Figure 8), showing the same pattern as that in the total number of tourism flows. The declining trend is also visible in the growth in tourism receipts per night, which dropped off after the mid 1980's and early 1990's, and recorded negative growth as of the early 2000's (see Figures 9 and 10).

In addition, the trend in the average length of stay of visitors (ALOS) was relatively steady over the years and showed no significant drop that would indicate that Aruba has lost its appeal as a vacation destination (see Figure 11). During the period 2011-2015, the ALOS declined notably, and, subsequently, saw a spike in growth in 2016-2017 (see Figure 12). This development was largely influenced by the Venezuelan tourists who were staying for shorter periods of time during 2011-2015 due to the foreign exchange restrictions imposed by the Venezuelan government. In 2016 and 2017, the number of these tourists fell off significantly, which helped drive up the ALOS for the rest of the market.

Overall, the development in the number of stay-over and cruise tourists, as well as tourism receipts, could possibly indicate that Aruba's tourism life cycle reached the consolidation stage during the 90's, and is currently in the stagnation stage.<sup>11</sup> It seems that Aruba's tourism has not yet reached the tipping point from which it starts to decline.

## Room supply: number of rooms and occupancy rate

Another indicator for determining the (development) stage of the tourism cycle is the total number of rooms available for tourists.<sup>12</sup> Figure 13 shows the progress for this indicator. The number of rooms recorded rapid growth as of 1986, and, subsequently, growth decelerated significantly from 1991 onwards. Consequently, the hotel occupancy rates decreased in the late 80's and early 90's (see Figure 14), after which they increased on average less than 1 percent in the period since 1996. While the number of rooms would seem to point to a tourism sector that has reached the consolidation phase and/or stagnation stage, it should be pointed out that it does not take into account alternative accommodations are considered, the number of available rooms for tourists goes up by more than 25 percent. This indicates that the growth rate of total rooms was significantly higher than suggested by the number of hotel rooms and time share units.

<sup>&</sup>lt;sup>11</sup> We note here that ECLAC (2008) concludes that Aruba reached the stagnation stage of the tourism life cycle in the year 2007.

<sup>&</sup>lt;sup>12</sup> Rooms include hotel rooms and time share units. In this paper, when we refer to rooms, we mean hotel and time share units.

<sup>&</sup>lt;sup>13</sup> According to an inventory done by the CBA for 2017, the number of additional rooms through alternative accommodations amounted to about 2,200.



#### Density indicators

The following density indicators are considered: number of stayover and cruise visitors per capita, average daily visitor density per 1000 inhabitants, average daily visitor density per km<sup>2</sup>, and number of rooms per km<sup>2</sup> (see Figures 15 through 19). To get a complete picture in terms of stayover visitors, in Figures 15 and 16, we look at visitors per capita, both including and excluding the Venezuelan market. These figures show a broadly similar pattern to the majority of indicators viewed previously. Accelerated growth as of the second half of the 80's, followed by slower growth from the nineties



onwards. This development could possibly suggest that Aruba's tourism has at least reached the consolidation stage. However, growth appears to be continuous without any signs of flattening out, possibly indicating that tourism has not yet reached the stagnation stage. This could also signal that Aruba has relatively become a mass tourism destination. Nevertheless, we observe that much higher density figures as compared to the 70's and even the late 80's could possibly be signs that Aruba is reaching its full capacity levels. In this regard, Aruba Tourism Authority (n.d.) notes that "high levels of density

leave little to no capacity for expansion over mid to long term" (p. 38).



#### The Z-score method for determining the stage in the tourism life cycle

As mentioned before, we estimate a Z-score for the percentage changes in several indicators and compare these with the benchmarks of  $-0.5\sigma$  and  $+0.5\sigma$  used by Haywood to determine the stage of the tourism life cycle in Aruba. Haywood distinguishes only four stages: the growth stage, the consolidation stage, the stagnation stage, and the decline stage. Percentage changes less than  $-0.5\sigma$  indicate that a tourism area is in the decline stage, while tourist areas with percentage changes greater than  $0.5\sigma$  are in the growth stage. Tourist areas with percentage changes between 0 and  $0.5\sigma$  are in the stagnation stage, and tourist areas with percentage changes between 0 are in the stagnation stage.

Figures 20 through 27 show the average Z-score for a number of indicators. The majority of indicators tend to suggest that Aruba was in the growth phase in the late 80's, passed quickly the consolidation stage in the early 90's, and, thereafter, moved to a stagnation phase. The timing of the growth and consolidation phases varies, but all indicators appear to point out that Aruba has been well into the

stagnation stage at least since 2000. It is again noted that the development in the Venezuelan tourism market has influenced the tourism performance in recent years, particularly reflected in the ALOS. Nevertheless, the indicators suggest that Aruba is currently still in the stagnation stage, and has not yet moved into the decline stage, based upon the Haywood method.



1) No data available for the period 1971-1985.



Apart from statistical data there are also several qualitative indicators, mentioned as characteristics of the different stages according to the TALC method, that suggest that the tourism sector in Aruba may be in the consolidation or stagnation stage. For instance, a large part of the Aruban economy is tied to tourism, while marketing and advertising are wide-reaching with efforts being made to extend the visitor season and the market area. In addition, some opposition and discontent among residents can be detected with regards to new projects, particularly environmental groups. We also observe some developments that seem to indicate a stagnation stage. Examples are that the peak level for occupancy rates may well have been reached at about 90 percent, while there is a heavy reliance on repeat visitation, and conventions are becoming increasingly important. New development is located around the original tourist area, while a number of the attractions in the tourist area are imported, e.g. the establishment of several international food chains and the imported souvenirs. As of 2012, promotional expenditure per tourist has increased substantially. This could be indicative of additional effort that is needed to maintain the level of visitors, which could also be a sign of the tourism cycle being in the stagnation stage.

## 3 Concluding remarks

In this paper, we have looked at a number of tourist indicators to assess the current development stage of the tourism sector in Aruba. While the density indicators point to Aruba's tourism being in the consolidation stage, the majority of the indicators analyzed suggest the tourism market in Aruba has reached the stagnation stage. However, it does appear that the sector has not yet reached the tipping point from which it would start to decline. Moreover, when alternative accommodations are taken into account, the number of available rooms has continued to grow, which may be initial signs of rejuvenation of this sector.

The findings in this paper indicate that the tourism sector alone is unlikely to serve as the engine of economic growth for the Aruban economy going forward if policymakers utilize the same growth model as they have done in the past. Growth in the past has been realized mainly by building new hotels and expanding room capacity. Given the high levels of the density indicators, it would seem that there is limited space to continue growing the sector in this manner. Therefore, the results of this paper suggest that policymakers should give serious consideration to whether or not building new

hotels and expanding room capacity going forward are the most efficient use of resources, given the expected benefits and costs.

# References

Aruba Tourism Authority (n.d.). Cu mira pa futuro: A destination development plan for Aruba 2017-2021.

Butler, R. (1980). The concept of a tourist area cycle of evolution: Implications for management of resources. *Canadian Geographer, XXIV(1),* 5-12.

Christaller, W. (1963). Some considerations of tourism location in Europe: the peripheral regions – underdeveloped countries – recreation areas. *Regional Science Association Papers*, 12, 103.

Croes, R.R. (2000). Anatomy of demand in international tourism: The case of Aruba. Koninklijke Van Gorcum & Comp. BV: Assen, The Netherlands.

De Albuquerque, K., & McElroy, J.L. (1992). Caribbean small-island tourism styles and sustainable strategies. *Environmental Management*, 16(5), 619-632.

ECLAC (2008). Tourism life cycle, tourism competitiveness and upgrading strategies in the Caribbean (LC/CAR/L.66).

Haywood, K.M. (1986). Can the tourist-area life cycle be made operational? *Tourism Management*, 154-167.

Noronha, R. (1976). Review on the Sociological Literature on Tourism. World Bank.

Plog, S.C. (1972). Why destination areas rise and fall in popularity. Unpublished paper presented to the Southern California Chapter. The Travel Research Association.

World Bank (Latin America and the Caribbean regional office) (1986). The economy of Aruba: Adjusting to changing conditions (Report No. 6299-ARU).