

The Life cycle of Kerala tourism

G Chandramohanan Asan

This article represents the application of product life cycle analysis on the tourism industry in Kerala State. It uses time series data of tourist arrivals to the state for over two decades. The seasonal variation is removed with 12-month moving average method and trend is determined by fitting a fourth degree polynomial, which is found to be the best fit for the data available.

The shape of the curve is taken as the first indication of the possible stage of the life cycle of Kerala tourism. Since there is no single measure that can identify the present stage of life cycle of a product, the behaviors of the characteristics usually associated with the identified stage are examined. Behaviour of sales, markets, consumers, market growth, competitors and costs give the indication that Kerala tourism is in the growth stage.

Realisation of the stage of life cycle helps in the planning process. Major limitations of the approach include the disregard in the approach towards exogenous variables that contribute to irregular variations that show up in the years to come.

Keywords: life cycle, tourism product, seasonal indices, life cycle characteristics.

Introduction

The theory of product life cycle has the potential to put into practice while planning tourist destinations. This concept provides a conceptual framework for understanding the process of change within tourist destinations (Singh, 1998). It provides a tool to conceptually forecast long term changes so that strategies could be evolved for harmonising land use, economic development and marketing (Getz, 1992). Gilbert and Christaller introduced the concept of three stages of evolution of resorts: discovery, growth and decline (Tooman, 1997). Destination Life Cycle model offered by Walter Christaller was more applicable to the European past. Destination Life Cycle model offered by Plog identified three main types of tourists: the allocentric, the midcentric and the psychocentric and attributes the rise and fall of a destination to the psychology of travelers (Tooman, 1997). The three types of tourists conform to income levels ranging from higher to lower respectively.

Butler in his original article appeared in the Canadian Geographer (Butler, 1980) expanded the model to six stages that corresponds closely with the five stage product life cycle. The six stages introduced by Butler were (i) Exploration, (ii) Involvement, (iii) Development, (iv) Consolidation, (v) Stagnation and (vi) Decline or Rejuvenation (Butler, 2004). This model by Butler has attracted the most attention and discussions. In the decline stage, tourists are drawn away by newer destinations. Those remaining would be weekend or day visitors. Non-tourism establishments replace tourism facilities as the area disengages from tourism industry. This result in reducing the visitors further and the remaining tourism facilities becomes unviable. The destination becomes a tourism slum or finds itself devoid of tourism activity altogether. In the Rejuvenation stage, a dramatic change in the resource base is established. A new set of artificial attractions is created or a previously unexploited natural resource is utilized. This can lead to the beginning of another cycle. Otherwise, a permanent decline set in.

Realistically, an outcome could be anywhere between a decline and a rejuvenation stage. The destination life-cycle model introduced by Butler is also referred as resort-cycle model (Tooman, 1997). Most researchers do not discount Butler's model

because the first stage may have been skipped. Shalini Singh (Singh, 1998) cites the examples of Cancun in Mexico, Languedoc-Roussillon in France and Disney Land in United States that have sidelined the early few stages. The weakness of the model is cited to be its failure to observe the final two or three stages. The model regards the stresses on the physical or social dimensions of the region as the factors causing decline of the destination. Other than these endogenous factors, exogenous factors also can lead to decline of a destination. Whatever is the number of development stages, all the product life cycle stages were observed to follow the same S-shaped curve, when represented on a normal distribution graph (Singh, 1998).

Problems with life cycle concept were further identified by Cooper and Jackson (1989) in the case of resorts. The life cycle model is destination specific and reflects policy decisions made for the destination. The current stage of any resort in the life cycle model is difficult to establish as there is no single measure that summarises all aspects of resort evolution. Measures taken for development, evolution of facilities and evolution of administrative structure, all contribute to the evolution of resorts.

Empirical studies that examined the life cycle concept in specific resorts are cited by Getz (Getz, 1992). These include the following:

- The resort Atlantic City in New Jersey is one destination that closely typifies the Butler's six stage model. In this case, the first two stages were skipped, but the latter four stages were fully distinguishable. The resort restored its lost tourist attractiveness when it introduced legalised gambling. With the introduction of gambling the decline was followed by rejuvenation. The market segment thus shifted from 'elite' to 'mass' tourists. There was an external factor- the general urban decay in US - which also contributed to the decline of the resort (Study by Stansfield, 1978).
- The life cycle model could not adequately explain the rise and fall of tourism in Lancaster County, Pennsylvania, as per a study by Hovinen. The decline was related to three related factors: relative location and accessibility, diversity of the tourism base, and effectiveness of better planning.

- The evolution of Grand Island Resort on the Louisiana coast was attributed to environmental processes like erosion and storm damage. This was a study of environmental factors by Meyer -Arendt.
- A positive evolution, which was mistaken for a "decline", is referred in the case of a cottage resort - Wasaga Beach, Ontario, Canada by Strapp in 1988. A decline in the average length of stay was matched by an expansion of second home development, which renewed the prosperity of the town.
- The destination life cycle of "Isle of Man" closely corresponds to the life cycle model. The decline was attributed to the general loss in popularity of British seaside resorts and failure to stay competitive [Cooper and Jackson (1980)]. But it is concluded in the study that life cycle model could not be used as a forecasting tool or for strategic management in the Isle of Man case. The utility of the model is in describing and analyzing tourism development and highlights the value of studying the factors influencing them.

Another destination is the Cayman Islands in the Caribbean. Here a resort was created which skipped the first stage of the life cycle of the Butler's model. A deviation could be seen after the development stage, when the participation of the local people increased due to government policies. This helped a prolonged maturity stage (Weaver 1990). In the case of Niagara Falls, no permanent decline is foreseen. Elements of consolidation, decline and rejuvenation are seen to co-exist (Getz, 1992).

The applicability of the life cycle model in planning and management of tourist areas and the issues involved in making it operational are discussed by Haywood (Haywood, 1985). According to Haywood, a method for identifying the stage in a life cycle is to use time series data and to plot yearly trend. Here, the unit of analysis could be a facility, town or region. Different segments in the relevant markets may display different growth and decline trends and hence the life cycle curve can have different patterns and stages. Haywood also admits that there could be difficulties and issues in identifying the stage of the unit of analysis in the life cycle.

Government of Kerala took up tourism promotion activities during the 7th five-year plan period, realising the potential of tourism development in Kerala (Department of Tourism, Government of Kerala, 2002). The Government declared tourism as an industry in 1986 and the industry was greeted with incentives and concessions for encouraging investments and promoting tourism. Today, the State has emerged as one of the most acclaimed tourist destination in the country. International recognition of Kerala tourism came in various forms. The World Travel and Tourism Council (WTTC) selected Kerala as a Partner State. "National Geographic" chose Kerala as "one of the 50 must see destinations of a life time". "Travel and Leisure" describes Kerala as one of the 100 great trips for the 21st Century. "Cosmopolitan" rates Kerala as one of the ten love nests in India. "Khaleeja Times" see Kerala as one of the six destinations of the millennium. With the slogan "God's own country", Kerala tourism is projected as a success story. The growth in the arrivals of tourists, especially foreign tourists, supports this claim. This study to examine the application of life cycle analysis in Kerala tourism is carried out in this background.

Methodology

It is desirable to use time series data as long a period as possible when a trend is to be determined (Croxtan, Cowden, & Klien, 1975). The time series data of month wise foreign tourist arrivals in Kerala, as published by Department of Tourism, Government of Kerala, is prepared for the years from 1986 to 2006. The monthly arrivals are adjusted for calendar variation. A 12-month centralized moving average is used for de-seasonalizing the time series data.

There are two possibilities for a seasonal pattern - either the pattern would remain the same over the period of time or the pattern undergo changes. It was found that the tourist arrival pattern has undergone changes over the period of time. Hence the seasonal indices are computed taking this into account and these seasonal indices are used to deseasonalize the seasonal variation from the time series data.

¹ The Isle of Man is located in the Irish Sea halfway between Britain and Ireland. It is self-governing and while it is part of the British Isles, it is not officially a part of the United Kingdom. The capital city is the resort and port of Douglas

The trend is identified on the basis of the deseasonalized time series data. A scatter plot of the data is obtained using the SPSS package. Constructions of various models were attempted using SPSS and CurveExpert 1.3. It was possible to get a ranking of the curve models according to its suitability for the data. The 4th degree polynomial is found to be the best model to represent tourist arrivals to Kerala and the model is used to project the tourist arrivals for the years up to 2010.

Besides seasonal variation and trend, a time series data will have two more components in the form of cyclical variations and irregular variations. The cyclical variation is explained by the ratio of the actual value of the variable and the expected value based on the trend curve, expressed in percentage. The interplay of a multitude of forces, other than those already eliminated, is largely responsible for the irregular movements which are usually to be seen in the curve of a series adjusted for seasonal variation and trend (Croxtton and Cowden, 1975). By the use of a short-term moving average, the irregular movements can be smoothed. Unexpected changes in the political climate and security threats, terrorism acts that result in banning the outbound and inbound tourist traffic like the 9/11 incident, or even any outbreak of war or tense situation in the region are all exogenous factors that result in irregular variations in the tourist traffic. The most recent is the economic recession that came into prominence in the second half of 2008. Both cyclical and irregular variations can be used only for describing the past trends.

The product classes have the longest life cycle whereas the life cycle of a specific brand can change quickly because of reasons like competition (Kotler, Bowen, & Makens, 1999). Tourist arrivals to India depend on the world tourism demand and tourist arrivals to Kerala depend on the tourist arrivals to India. Demand for product forms in Kerala like beaches or backwaters depend on the tourist arrivals to Kerala. The demand for each product form influence the tourist arrivals in specific destinations. Thus, the immediate superset influences the life cycle of the brand or product form. Analysis of life cycle hence cannot be taken up independently of the universe it belongs.

Growth of Keralatourism

A study by Tata Consultancy Services carried out a situation analysis of Kerala tourism (Tata, 2000). Though the study was conducted in the year 2000, the strengths identified in the study give an indication of the reasons for the commendable growth that Kerala tourism has achieved. The strengths included the presence of excellent natural resources like backwaters, hill stations and beaches, Ayurveda and the high literacy level.

Kerala Tourism is subjected to studies by different agencies. Kerala Tourism Vision 2025 projected the foreign tourist arrivals at 4.32 lakhs, World Tourism Organization (UNWTO) estimated the figure as 5.1 lakhs and the World Tourism and Travel Council (WTTC) put the figure at 5.06 lakhs, all for the year 2010. The actual tourist arrivals have crossed these estimates in 2007. Actual number of foreign tourist arrivals to the State was 51816 in 1987. In seven years, this was doubled. It took just another six years to double again and reached the figure of 209933 in 2000. In 2006, the number of tourist arrivals was 428534 and crossed the five lakh mark in 2007.

A remarkable feature of the growth of foreign tourists to Kerala is its emergence as an important destination in India, in spite of its location far and outside the traditional Golden Triangle connecting Delhi, Agra and Jaipur. About ten percent of the foreign tourists, coming to India visit Kerala. In the case of domestic tourists, the trend is showing a consistent growth, though not impressive as that of foreign tourist arrivals. The achievement in the growth is to be viewed taking into account of the geographic location of Kerala far away from the tourist origins in the country and further discouraged by the pricing of the transport connections.

Seasonal Characteristics

Seasonal variation in tourist arrivals is a phenomenon experienced by most of the tourist destinations in India. Kerala tourism considers the six months from October to March as the tourism season, and most of the foreign tourist arrivals are recorded during this period. Challenging this seasonality is always seen as an important strategy for economic rewards by the tourism industry. By looking at the

nationality of the foreign tourists coming to Kerala, the majority is from Europe and the winter season in the region coincides with the tourism season of Kerala.

Monthly tourist arrivals to Kerala for the years from 1988 to 2006 are used to compute seasonal indices. The pattern of seasonal indices over the years is changing as can be seen from Table 1. The most ideal situation is when the indices remain the same with the value 100 all through a year. The seasonal index was always the highest in the month of January and June was the leanest month for tourist arrivals. A reduction in the higher index values in the peak season and an increase in the lower index values in the lean season in a growing tourism market would indicate a trend that would take to the ideal situation referred earlier. The first and fourth quarters of the year constitute the tourist season and the middle two quarters form the lean season as far as foreign tourist arrivals are concerned. In the first quarter, index values of February and March are on the rise. All the other four months in the peak season are witnessing a decreasing trend in the index values. The tourist arrivals in all the three months in the second quarter, July and August in the third quarter contribute an increasing trend in the index values. In other words, the change in the pattern of tourist arrivals over the months in a year is turning out as an outcome that could improve the economic sustainability of tourism industry. This could lead to higher occupancy of tourist accommodation in the second and third quarter, more stable employment opportunities, and better

management of tourism destinations.

GINI index is often used as a measure of the inequality in income distribution. Low values of GINI indices indicate more equitable distribution of income and when the indices are high, there is more unequal distribution. The index values, expressed in percentages, are obtained by dividing the area delimited by the Lorenz curve and the linear curve by the area of the triangle with side length 1. The seasonal concentration of tourists can be represented using GINI index (Manente & Celotto, 9-11, June 2004). When the index value is high, the seasonal concentration is high, indicating the risk of decline of the destination. The GINI indices for the years from 1997 to 2007 are computed for Kerala in Table 2. A quadratic fit in the form $y = a+bx+cx^2$ is made for the Lorenz curves. During the last ten years, the seasonal concentration has not undergone much change as there is not much variation in the index values and the risk of decline of the destination is not visible.

In absolute terms, the growth of tourism is still contributed by the increase in tourist arrivals in the peak season. Considering the fact that the investments made in tourist accommodation that increased the number of beds in the last ten years, the tourist arrivals are at par or below the capacity levels even in the peak season. The spread of tourist arrivals over the months could be perhaps the most important contributing factor for the future growth of tourism in the State.

Table 1: Seasonal indices for tourist arrivals in Kerala

Month	1988	1989	1990	1991	1992	1993
January	196	191	167	173	160	141
February	144	150	138	135	134	124
March	102	113	109	109	96	105
April	56	62	66	78	82	86
May	30	34	58	57	64	67
June	21	27	45	45	63	62
July	41	51	59	66	55	72
August	74	74	81	74	91	94
September	47	61	78	82	87	88
October	140	120	116	102	109	102
November	170	154	124	123	125	117
December	181	164	157	156	133	142

Month	1994	1995	1996	1997	1998	1999	2000
January	179	184	161	166	176	186	154
February	147	157	148	136	151	148	147
March	107	138	146	129	131	119	108
April	70	81	82	81	104	82	84
May	51	55	47	60	72	59	76
June	59	33	37	52	36	46	48
July	52	61	52	68	35	63	48
August	56	95	81	78	62	88	97
September	174	92	88	65	76	73	97
October	164	86	78	76	77	83	91
November	56	104	130	123	120	117	118
December	86	113	149	166	161	136	132

Month	2001	2002	2003	2004	2005	2006
January	170	173	186	164	161	176
February	167	170	158	153	154	167
March	122	111	109	122	126	116
April	102	101	86	82	75	95
May	62	58	53	52	55	60
June	39	34	44	43	48	47
July	46	43	60	58	62	66
August	81	68	76	93	83	79
September	75	83	78	72	66	58
October	72	95	93	76	90	74
November	117	120	121	132	133	115
December	147	143	136	153	148	147

Table 2: Seasonal concentration of tourist flows represented using GINI indices

Year	Coefficient values ($y = a+bx+cx_2$)			Area under Lorenz curve	GINI index
	a=	b=	c=		
1997	1.578913	0.286832	0.006828	0.386790	22.64
1998	0.552468	0.206867	0.007815	0.369447	26.11
1999	1.238299	0.324135	0.006427	0.388684	22.26
2000	-0.641280	0.484026	0.005258	0.410877	17.82
2001	1.173645	0.194400	0.007791	0.368628	26.27
2002	-0.065260	0.286079	0.007143	0.380473	23.91
2003	0.678544	0.315597	0.006689	0.387550	22.49
2004	0.883459	0.280739	0.007095	0.385708	22.86
2005	1.119287	0.262527	0.007240	0.383792	23.24
2006	1.349233	0.267998	0.007097	0.384062	23.19
2007	1.530048	0.181483	0.007970	0.371695	25.66

Tourist projections

With the capacity level still high, Kerala is expected to maintain higher growth in tourist arrivals. The time series data from 1988 to 2006 is used to fit a model with the objective of projecting the tourist arrivals for the coming years. Using a 12-month moving average, the actual arrivals are de-seasonalized before attempting for projections. The best estimated model is as follows:

$$y = 5174.3373 - 99.1046 t + 3.8887 t^2 - 0.0283 t^3 + 7.0108 e^{-0.05 t}$$

(Standard error = 1356.006, Correlation coefficient = 0.9886), where, Y is the number of foreign tourist arrivals and t represents the time period starting from 1 for January 1988. The scatter plot and the estimated polygon are shown in Figure 2. The seasonal indices for the months are applied on the de-seasonalized projection figures obtained from the model and the tourist arrivals for the three years from 2008 are estimated as given in Table 3.

Table 3: Estimated tourist arrivals to Kerala

Month\Year	2008	2009	2010
January	83639	102006	125108
February	80661	98435	120764
March	56948	69539	85337
April	47408	57922	71098
May	30437	37207	45682
June	24238	29645	36404
July	34604	42344	52007
August	42113	51555	63331
September	31437	38502	47302
October	40784	49969	61399
November	64451	78995	97070
December	83777	102719	126233
Total	620497	758838	931735
Growth rate	20.30	22.30	22.78

Globally, the increase in international tourist arrivals is projected to be around 3 to 4% for the year 2008 and anticipates a long-term growth rate of 4.1 % a year through 2020 (UNWTO, 2008). Regionwise forecasts for international tourist arrivals are given in Table 4.

Table 4: Estimated growth in international tourist arrivals.

Region	2007	Forecast 2008
World	6.1%	3 to 4%
Europe	4.2%	3 to 4%
Asia and the Pacific	10.2%	8 to 10%
Americas	4.7%	1 to 3%
Africa	7.9%	6 to 8%
Middle east	13.4%	6 to 10%

Source: UNWTO World Tourism Barometer, Volume 6, No.1, January 2008

In 2001, the share of tourist arrivals in India was 0.37% which increased every year and reached 0.55% in 2007. Tourist arrivals to India were growing at impressive rates since 2003. The arrivals increased by 26.8% from 2003 to 2004, by 13.3 % from 2004 to 2005, by 13.5% from 2005 to 2006 and by 11.9% from 2006 to 2007 (Ministry of Tourism, Government of India, 2008). If the world tourist arrivals maintain the same rate of growth of 6%, and if the share of tourist arrivals maintain the share of 0.55% recorded in 2007, and if the share of Kerala tourism is maintained at the same rate as in 2007, the projected foreign tourist arrivals would be as given below:

World tourism	
2008	- 952 million
2009	- 1009 million
2010	- 1070 million
India tourism	
2008	- 5.6 million
2009	- 6.2 million
2010	- 7 million
Kerala tourism	
2008	- 0.58 million
2009	- 0.65 million
2010	- 0.73 million

The above estimates assume maintaining of the present trend. The projected tourist arrivals to Kerala given in Table 3 are higher than the estimates given above. Though the international tourist arrivals are slowing down, the decline is minimum in the Asia and Pacific region. The market share of American tourists in Kerala is below 15% and the economic recession, which is highlighted as the reason for the decreased rate of growth, is not likely to make a great impact on

Kerala tourism. Like the Olympics held at China in 2008, India is hosting the Commonwealth games in 2010. The game is capable of pulling more European tourists to Kerala since tourists from UK form the biggest group nationality wise.

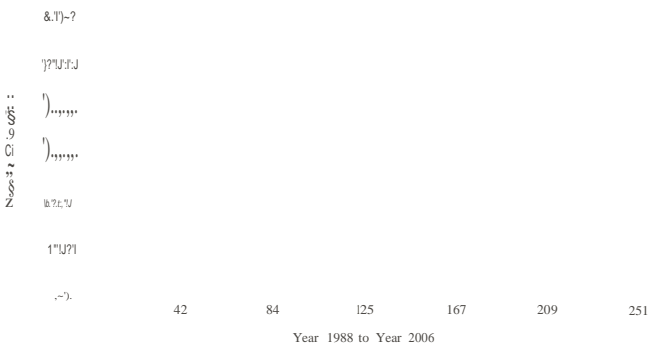


Figure 2: The scatter plot of de-seasonalised tourist arrivals and the polynomial curve showing the foreign tourist arrival pattern in Kerala

Identification of life cycle stage

The shape of the curve and the projected figures for the years up to 2010 indicates that Kerala tourism is on its growth path. The real take off seems to have taken place in the year end of 2001. The beginning of the 'introduction' stage is around 1932 and not included in the above analysis.

Behaviour characteristics of sales, cost, profit, customers, market and competition with respect to Kerala tourism are discussed below:

Sales

There will be low sales in the 'Introduction' stage and this will be rapidly rising in the 'Growth' stage (Kotler, Keller, Koshy, & Jha, 2007). Sales will be peak in the 'Maturity' stage and will come down in the 'Decline' stage. In tourism, sales could be represented by the foreign exchange revenue or the number of tourist arrivals. Here, sale is represented by the number of tourist arrivals. Low growth was recorded for the ten years between 1988 and 2001, revealing the characteristic of the 'introduction' stage of the life cycle. Tourist arrivals are maintaining double digit growth rate for the years since 2002, except for 2005, as can be seen below. The high growth in tourist arrivals currently experiencing resembles the growth in sales during the growth stage of a product life cycle.

Year	Growth rate(%)	Year	Growth rate(%)	Year	Growth rate(%)
1988	0.52	1995	36.73	2002	11.37
1989	20.87	1996	23.7	2003	26.68
1990	506	1997	3.15	2004	17.28
1991	4.79	1998	5.02	2005	0.28
1992	30.77	1999	5.52	2006	23.68
1993	5.05	2000	3.84	2007	20.37
1994	9.83	2001	-0.53		

Costs per tourist

The costs to be considered include the operating costs and overhead costs in a typical commercial establishment. In the context here, the relevance is more for the cost incurred by the Government, since Kerala tourism is taken as a product and the management of the product is by the Government. Expenses of tourism by Government fall into two broad heads - plan expenditure and non plan expenditure. Non-plan expenditure is for meeting the establishment costs of Department of Tourism and can be considered as operation expenses. Plan expenditure includes capital expenditure. For budgeting convenience, investment in infrastructure, which is of capital investment in nature, is included under revenue expense. Most of these investments are in long term assets like buildings, roads, and other civil construction works. Hence these expenses are separated from the operating expenses. Kerala Tourism Development Corporation (KTDC), the Government owned company, accounts 5 to 10% value of such assets in its annual financial statements. Assuming the same, 10% of the investment in infrastructure and capital is added to the non-plan expenses to reflect the cost of such investments from the subsequent year onwards.

The expenses are compiled for the years from 1992-93 to 2006-07 from the Administrative Reports of Department of Tourism, Government of Kerala. These are converted to constant prices using Consumer Price Index with base year 1982 as 100. The number of foreign and domestic tourist arrivals is recalculated for the financial year periods from April to March. Costs per tourist computed thus are presented in Table 5. As per the pattern, the operating expenses have come down and more or less stabilized since 2000. Per customer

cost is usually high in the introductory stage of a product life cycle, but comes down in the growth stage and will be lowest in the later stages. In the case of Kerala tourism also, the operating cost shows a declining trend as can be seen in Figure 3. Though it is difficult to identify the life cycle stage from the figures and graph, the pattern clearly is moving towards the growth stage of the life cycle.

Table 5: Index values showing changes in pattern of expenses per tourist over the years

	Operating expense	Capital expense
1992-93	100	100
1993-94	122	113
1994-95	50	88
1995-96	33	75
1996-97	22	125
1997-98	28	175
1998-99	28	113
1999-00	33	113
2000-01	33	113
2001-02	33	113
2002-03	22	175
2003-04	39	150
2004-05	39	163
2005-06	39	213
2006-07	39	163

250F~ig_~a~tte__rm~ogec~m~e~xp~ur~e~rt~ou~ri~st
 700
 (Index value for 1992-93 taken as 100)

Profits

The general characteristics of the life cycle in terms of profit is that it would be negative in the introduction stage, but rises in the growth stage and will have the highest profit level in the maturity stage. In the case of Kerala tourism, the earnings in foreign exchange is taken as the variable representing profit. The actual

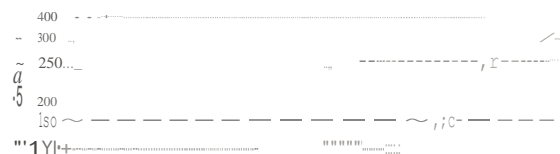
profit includes the earnings from domestic tourists as well as the cost incurred by the private sector. Since intention here is only to get a trend in the accrual of profit, the net foreign exchange earnings in the view point of the government is taken. Foreign exchange earnings less the government expenditures are given in Table 6. The figures are brought to a common base using the Consumer Price Index with base year 1982. It can be seen that the net earnings were positive from the first year taken into account for the analysis here. The net earnings is increasing as can be seen in the Figure 4, which is characteristic of the growth stage of a product life cycle.

Table 6: Foreign exchange earnings from tourism (Rupees in crores)

	Total earnings* (Current prices)	Net earnings (Current prices)	Net earnings (Constant prices)
1992-93	59.75	55.08	22.95
1993-94	105.72	99.09	38.41
1994-95	116.11	111.39	39.22
1995-96	158.76	151.28	48.33
1996-97	196.38	189.15	55.31
1997-98	273.2	264.44	72.25
1998-99	302.08	290.89	70.26
1999-00	416.07	402.96	94.15
2000-01	525.3	510.63	115.01
2001-02	535.67	519.18	112.13
2002-03	705.67	693.81	143.94
2003-04	983.37	962.3	192.46
2004-05	1266.77	1245.09	239.44
2005-06	1552.31	1526.66	281.67
2006-07	1988.4	1961.9	338.84

*Source: Tourist Statistics (various years, Department of Tourism, Government of Kerala)

Figure 4: Net earnings at constant prices (Base year 1982)



Customers

The customers of the product are the tourists. According to another study, majority of the international visitors to Kerala fall in the age group 21 - 35 years (TRKL, 2001). 'Innovators' visit the destination in the 'introduction' stage and 'early adopters' in the growth stage (Kotler, Keller, Koshy, & Jha, 2007). Lack of information does not permit classification of tourists into 'innovators' and 'early adopters'. However, earlier studies have categorized the tourists based on the frequency of visits to Kerala. According to a survey conducted on behalf of Department of Tourism in 2006, 58.5% of the foreign tourists were visiting Kerala for the first time and 29.9% visited Kerala twice (Department of Tourism, Government of Kerala, 2007). Thus the first timers are dominating the share which can be taken as an indication of the introduction or growth stages. Higher share of repeat visitors is usually associated with the maturity stage of a destination.

Market

Most of the tourists to Kerala were from Europe in all these years. In the second place was Asia and Pacific. Except from Sri Lanka, tourist arrivals from all other countries in this market were increasing. USA is the other prominent market for Kerala tourism. The share of markets is given in Table 7. As shown in Figure 5, the indices of growth in tourist arrivals from all these markets were on the rise. It cannot be said that the markets have shown signs of consolidation and the trend seen is growth. As per the Euler's model, characteristics of the market are more comparable with the development stage of life cycle.

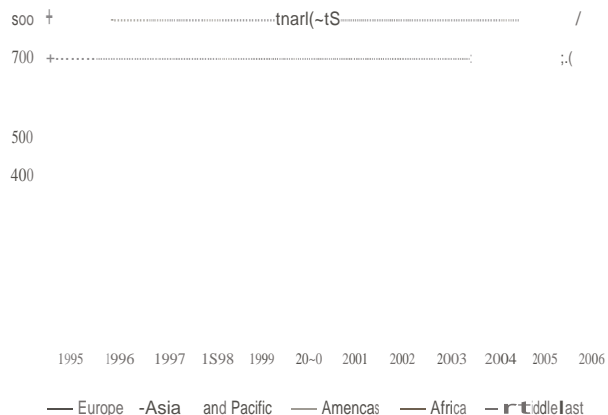


Table 7: Market share of world tourism markets in Kerala tourism

	Europe	Asia and Pacific	Americas	Africa	Middle East	Total
1995	63	23	10	1	4	100
1996	55	32	11	0	2	100
1997	56	30	12	0	3	100
1998	57	29	11	0	3	100
1999	58	29	10	0	4	100
2000	52	30	14	1	4	100
2001	58	25	13	1	3	100
2002	55	24	16	1	4	100
2003	58	21	12	1	8	100
2004	60	21	12	1	6	100
2005	57	23	12	2	7	100
2006	58	20	13	2	7	100

Competitors

Kerala figures in the top 10 States in India that attracts maximum number of foreign tourists. The share of Kerala and the other nine states are given in Table 8. Among the ten states, Andhra Pradesh, Karnataka, West Bengal, Delhi and Rajasthan have managed to show an increasing trend in the market share from 2001 to 2006. Though marginal, Kerala is among the other five states that experienced a declining trend in the market share. Two states in south India - Karnataka and Andhra Pradesh are the competing states that in South India that has made a dent in the market share of Kerala. At the same time, Rajasthan continues to be the state that attracts maximum number of foreign tourists and the State has strengthened its position between 2001 and 2007. Goa is Kerala's primary competitor as per a study and 15% of international visitors and 11% of domestic visitors consider Goa as an alternative destination (TRKL, 2001). But in number of foreign tourist arrivals, Goa ranks below Kerala.

In the Butler's (1980) model, the 'introduction' and 'growth' stages are represented by the four stages - exploration, involvement, development and consolidation. Number of visitors is limited during the exploration stage, but increases as the life cycle moves to involvement, development and consolidation stages.

Table 8: Top 10 States in India with maximum foreign tourist arrivals

	Percentage of foreign tourist arrivals						
	2001	2002	2003	2004	2005	2006	2007
1. Andhra Pradesh							
State arrivals to gross state arrivals	1.24	4.08	7.14	5.99	5.63	5.7	5.8
State arrivals to country arrivals	2.65	8.82	17.58	14.49	14.29	15.06	15.15
2. Goa							
State arrivals to gross state arrivals	4.78	5.27	4.68	4.34	3.39	3.24	3.02
State arrivals to country arrivals	10.25	11.39	11.53	10.51	8.59	8.55	7.82
3. Karnataka							
State arrivals to gross state arrivals	2.59	1.15	3.72	6.34	5.48	4.3	4.06
State arrivals to country arrivals	5.55	2.5	9.17	15.34	13.91	11.37	10.52
4. Kerala							
State arrivals to gross state arrivals	3.84	4.51	4.39	4.13	3.48	3.65	3.92
State arrivals to country arrivals	8.23	9.75	10.81	9.99	8.84	9.64	10.15
5. Maharashtra							
State arrivals to gross state arrivals	16.84	14.91	14.69	14.57	14.57	14.57	14.58
State arrivals to country arrivals	36.08	32.25	36.19	35.24	37	38.5	37.77
6. Rajasthan							
State arrivals to gross state arrivals	11.19	8.31	9.36	11.62	11.37	10.39	10.64
State arrivals to country arrivals	23.97	17.97	23.06	28.11	28.87	27.44	27.57
7. Tamil Nadu							
State arrivals to gross state arrivals	14.22	15.6	13.42	12.66	11.85	11.23	12.93
State arrivals to country arrivals	30.47	33.75	33.07	30.6	30.1	29.67	33.52
8. Uttar Pradesh							
State arrivals to gross state arrivals	14.62	13.77	12.28	12.41	11.81	11.31	11.34
State arrivals to country arrivals	31.33	29.78	30.26	30	29.97	29.88	29.38
9. West Bengal							
State arrivals to gross state arrivals	5.23	10.26	10.5	9.28	9	8.5	8.77
State arrivals to country arrivals	11.2	22.2	25.88	22.44	22.86	22.44	22.72
10. Delhi							
State arrivals to gross state arrivals	15.27	10.53	10.33	10.04	15.2	16.81	15.33
State arrivals to country arrivals	32.72	22.77	25.45	24.28	38.58	44.41	39.73

Formation of Department of Tourism and recognition of tourism as an industry are indicators of the involvement of Government and the people in developing tourism in Kerala. Investments happen in the developing stage. From the part of the Government, investment in infrastructure projects is showing an increasing trend. Most of the private sector investment in a tourism destination is for developing tourist

accommodation. The number of beds made available to tourists for the years from 1999-00 to 2006-07 show the increasing involvement of the private sector. There will be intensive marketing efforts in the developing stage as per the Butler's model. As per the three indicators given in Table 9, the life cycle of Kerala tourism fall in the development / consolidation stage.

Table 9: Investment in infrastructure, accommodation and marketing

Year	Infrastructure investment by Government	Number of tourist beds	Marketing expense by Government
1999-00	99.31	7162	55.55
2000-01	93.71	8440	55.69
2001-02	104.08	9279	74.78
2002-03	320.23	10875	80.4
2003-04	204.33	9804	76.09
2004-05	234.27	13275	67.95
2005-06	253.97	15497	69.31
2006-07	222.56	16148	40.54

Note: Investment in infrastructure and marketing expenses given in rupees per foreign tourist at Constant prices.

Conclusion

As identified by Cooper and Jackson (1989), there is no single measure that could be used to identify the current stage of life cycle of a product. However, the characteristics examined tends to identify the current stage of life cycle of Kerala tourism as the "Growth" phase.

The nature of growth phase reveals a continuity for the ensuing three years as reflected in the projected estimates. A well defined market has emerged with Europe in the lead. But the market share of Europe is being replaced by other markets. Marketing by Government forms 10 to 15 per cent of the budgeted expenditure in tourism reflecting heavy advertising typical of growth stage of product life cycle. This suggests the need for properly planned campaign to sustain the growth phase and to evolve further by implementation of appropriate measures so that Kerala becomes an inevitable tourist destination in the world.

About the Author:

G Chandramohan Asan; currently, the Executive Director of MVS Software Consulting (P) Limited, Trivandrum, Kerala. He has more than 30 years of experience in consultancy and research in transport and tourism sectors; he has held positions of Deputy Chief Project Coordinator in National Transportation Planning and Research Centre (NATPAC) and Director, Kerala Institute of Tourism and Travel Studies (KITTS).
Email: cmtoread@gmail.com

Reference:

- Administrative Reports (various years), Department of Tourism, Government of Kerala
- Butler, R. (2004). The Tourism area Life Cycle in the Twenty-First Century. In A. A. Lew, C. M. Hall, & A. M. Williams, *A Companion to Tourism* (pp. 159-169). MA: Blackwell Publishing Ltd.
- Croxton, F. E., Cowden, D. J., & Klien, S. (1975). *Applied General Statistics*. New Delhi: Prentice Hall of India Pvt. Ltd.
- Department of Tourism, Government of Kerala. (2007). *Continuous Tourist Survey*. Datamation Research Analyst.
- Department of Tourism, Government of Kerala. (2002). *Tourism Vision 2025*. Trivandrum: Government of Kerala.
- Getz, D. (1992). Tourism Planning and Destination Life Cycle. *Annals of Tourism Research*, 19, 752-770.
- Haywood, K. M. (1985). Can the Tourist Area Life Cycle be Made Operational. *Tourism Management*, 154-167.
- Kotler, P., Bowen, J., & Makens, J. (1999). *Marketing for Hospitality and Tourism* (2 ed.). Pearson Education Inc.
- Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2007). *Marketing Management - A South Asian Perspective* (12 ed.). Pearson Education Inc.
- Manente, M., & Celotto, E. (9-11, June 2004). From Sustainable Tourism to Decline: How to Monitor Risk. *Seventh International Conference on Tourism Statistics*. Stockholm: Ciset, University of Venice, Italy.
- Ministry of Tourism, Government of India. (2008). *Annual Report 2007-08*. Government of India.
- Singh, S. (1998). Probing the Product Life Cycle Further. *Tourism Recreation Research*, 23 (2), 61-63.
- T. C. (2000). *Economic Benefits of Tourism Sector in Kerala*. Mumbai: Tata Consultancy Services.
- Tooman, A. (1997). Applications of the Life-Cycle model in Tourism. *Annals of Tourism Research*, 24 (1), 214-234.
- Tourist Statistics (various years), Department of Tourism, Government of Kerala
- TRKL. (2001). *Vagamon Hill Retreat - Macro Level Tourism Perspective Plan*. Thiruvananthapuram: PKF and EDSA for Tourism Resorts Kerala Limited.
- UNWTO. (2008, January). World Tourism Barometer. 6 (1).