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**SOCIO - ECONOMIC CONSTRAINTS THAT IMPEDE SUSTAINABLE DEVELOPMENT OF TOURIST INDUSTRY**

(Case Study - Hikkaduwa D.S. Division)

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**1. Introduction**

Sri Lanka's rich, diverse tourist attractions are located in all climatic and topographic zones in the country. The cultural heritage with a history of over 2500 years, favourable climatic conditions, scenic beaches, and bio-diversity are the main tourist attractions of the country. Tourism has a great economic potential and it must be planned and managed to yield optimum benefits while minimizing or eliminating adverse socio - economic and environmental impacts.

The objective of this study is to highlight some of the socio-economic constraints that impede sustainable development of tourism in Sri Lanka. The study focuses attention on tourist activities in the coastal zone with special reference to Hikkaduwa. It is justifiable to select Hikkaduwa for a case study as the development of tourism in Sri Lanka is closely associated with the development of tourist industry in Hikkaduwa.

**2. A Brief Account of the Past, Present, and Future Trends of the Tourist Industry in Sri Lanka**

The tourist board was established in January 1966, by Act 10 of Parliament replacing the Tourist Bureau, that had been existing since May 1937, The Ceylon Hotels Corporation which was established in June 1966 by Act No. 14 of Parliament was an additional step in the expansion of the tourist industry. The "Tourism Development Plan" which was drawn up in 1967 embodies information needed for the development of the tourist industry in Sri Lanka. Tourist arrivals increased spectacularly from a mere 23,666 in 1967 to a phenomenal 407,200 in 1982. (Table 1) The stable socio-economic and political environment, incentives introduced by the Tourist Board, including propaganda campaign and availability of faster and cheaper international transport have largely contributed to the growth of the industry.

The tourist arrivals declined drastically during the period from 1982 to 1989. Several interrelated factors contributed to this phenomenon. Some of the factors directly responsible for the sharp decline of tourist arrivals were the ethnic violence in the Northern and Eastern parts of Sri Lanka, youth uprising and political violence in the Southern province. Sudden closure of tourist hotels and resorts compelled foreign tourists to leave the island in the midst of their journey. Tourist arrivals had dropped from 407,200 in 1982 to 180,000 in 1987 which is a 44 per cent decline when compared with tourist arrivals in 1982.

**Table 1: Tourist Arrivals.**

Year	Tourist arrivals
1966	18,969
1967	23,666
1968	28,272
1969	40,204
1970	46,247
1971	39,654
1972	56,047
1973	77,888
1974	85,011
1975	103,204
1976	118,971
1977	153,665
1978	192,592
1979	250,164
1980	321,780
1981	370,742
1982	407,200

*Source: Ceylon Tourist Board, 1994.*

The beginning of the 1990 decade showed a remarkable recovery of the tourist industry. This is primarily due to the propaganda activities carried out by the Tourist Board in foreign countries to create an awareness of diverse tourist attractions in Sri Lanka. Sri Lanka's participation in Travel

Marts in Paris, Berlin, London and Rome helped immensely to attract tourists. Furthermore marketing agents were placed in Frankfurt, Paris, London, Tokyo and Belgium to popularize Sri Lanka as a tourist destination. The remarkable rise of incoming tourists is as follows.

#### Tourist Arrivals

1990	297,888
1991	317,703
1992	393,669
1993	392,260

*Source: Ceylon Tourist Board, 1994.*

It is clear that there had been several ups and downs in the tourist industry. However it had contributed considerably to increasing annual foreign exchange earning capacity and generating employment opportunities. Economic benefits to local communities through enhanced employment opportunities are the principal advantages of tourism in regional development. Expansion and upgrading of infra-structural facilities and development of cottage and small scale industries are also direct benefits of tourist industry. There are five different multipliers to measure the impact of tourist expenditure on national economy of the country.

1. **Output multiplier** which shows the increase in gross output of the national economy as a result of tourist expenditure.
2. **Income multiplier** which shows the increase in income created as a result of tourist expenditure by way of wages and salaries, profits, interests and rents.
3. **Employment multiplier** shows the number of jobs created as a result of tourist expenditure
4. **Government revenue multiplier** shows the public sector revenue generated as a result of tourist expenditure by way of direct and indirect taxes, duties, levies, fees, etc.
5. **Import multiplier** shows imports required to support a given level of tourist expenditure.

The multiplier analysis shows the effects of tourist expenditure on the above magnitudes at three different levels. First, there are “direct effects” created in the front-line tourism related business establishments which produce, sell goods and services, directly to the tourists. Secondly, there are “indirect effects” created when these front-line tourism enterprises spend part of their receipts for purchase of goods and services from other sectors of the national economy to be used as inputs which in turn stimulate production in the “supplying sectors” in different rounds. Finally, there are “induced effects” created when the households which receive income from the front-line tourism enterprises or from the supplying sectors’ re-spend part of their income for purchases of goods and services. Thus the total effect of tourist expenditure is obtained by adding the direct, indirect and induced effects (Samaranayake, H.M.S. 1993).

### **3. Sustainable Development of Tourist Industry**

The sustainable development of tourist industry meets the needs of the present without compromising the ability of future generation to meet their needs.

The sustainability of tourist industry is closely associated with environmental carrying capacity which refers to the maximum level of tourist activity a place can take before it deteriorates its attraction.

### **4. Hikkaduwa Tourist Complex**

Among the 16 Divisional Secretary Divisions in the Galle District, Hikkaduwa is endowed with natural resources to attract both local and foreign tourists. Coastal frontage with clean beaches, marine sanctuary of 45 hectares in extent with reef lagoon and diverse marine organisms are the main attractions. The Tourist complex is located approximately 100 km south of Colombo and 15 km north of Galle.

The local economy of the Hikkaduwa D.S. Division is based primarily on tourist industry. Surveys reveal that there are 310 tourist related establishments and approximately 1750 people are directly employed in the industry. It also provides indirect earning avenues to a large number of

people particularly within the Hikkaduwa D.S. Division and in the Galle District.

The employment structure shows that 45 percent are employed in hotels, 23 percent in guest houses, 14 percent in restaurants and 18 percent in shops. Nearly 75 percent of the businesses belong to local residents in the Hikkaduwa D.S. Division and the balance is managed by entrepreneurs from Galle District and other Districts.

The narrow beaches of Wawulagala west and Panangoda Grama Sevaka Divisions are frequently used by visitors for viewing corals. The G.N. Divisions of Narigama, Wallaboda, Wewala have broad beaches which attract foreign tourists for activities such as sun-bathing, surfing, diving, swimming, etc. the general distributional patterns of hotels, guest houses, restaurants and shops are shown in map 1.

Hikkaduwa is an ideal example to prove that economic gains and environmental quality have not been considered equally important in the process of tourist development activities. The very features that attracted tourists (both foreign and local) have been threatened by haphazard development.

One of the salient characteristics of tourism in Hikkaduwa is that its over dependence on tourist industry as an easy way of earning money. Numerous environmental problems have emerged due to unplanned high density of tourist activities along the coastal strip extending from Urawatta to Pitiwella. Eg. Godagama, Seenigama, Thotagamuwa, Hikkaduwa town, Narigama, Thiranagama, Dodanduwa.

#### **5. Some of the Adverse Environmental Effects of Tourism in Hikkaduwa are as follows**

- (1) Destruction of coral reefs
- (2) Depletion of coral fish resources
- (3) Changes in land use
- (4) Coastal erosion
- (5) Problems of solid waste disposal

- (6) Problems of sewage disposal
- (7) Contamination of ground water
- (8) Pollution of surface water
- (9) Eutrophication
- (10) Degradation of important cultural historic or recreational areas.

Following factors have contributed to the problems of water pollution in Hikkaduwa coastal areas.

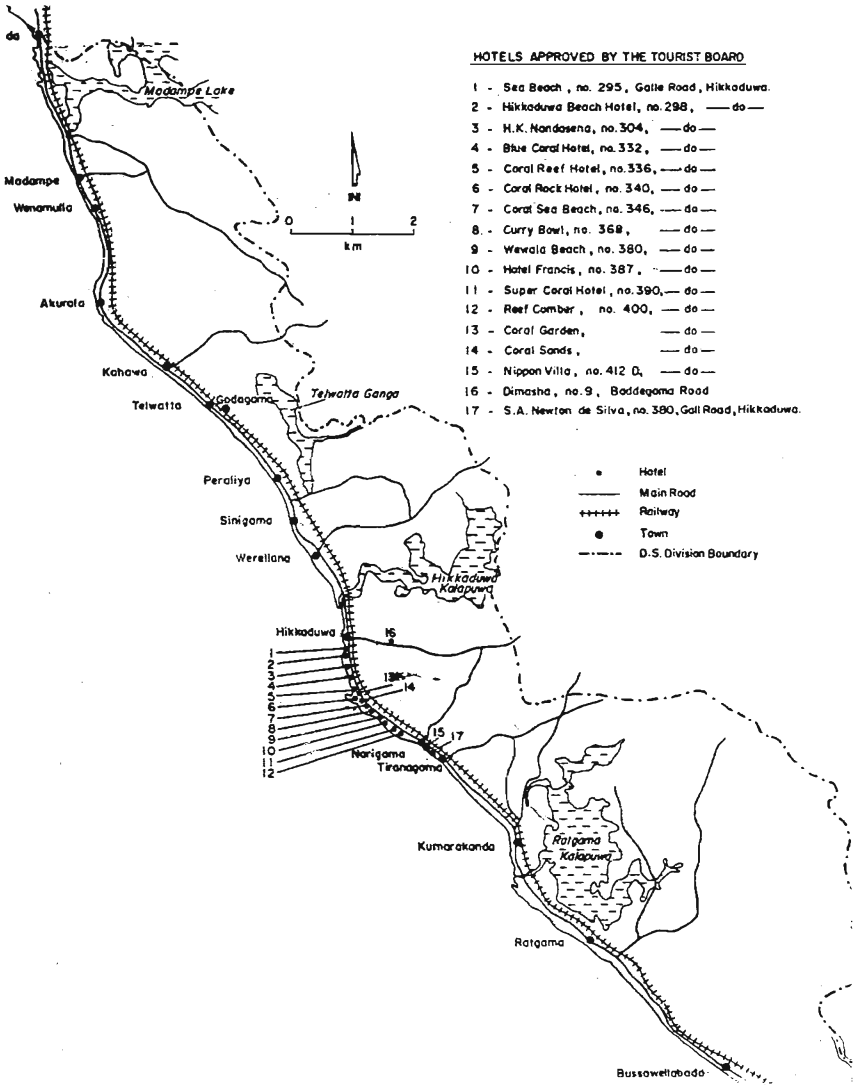
- (1) Direct discharge from large hotels
- (2) Indirect discharges from smaller (30-60 room) hotels and other establishments.
- (3) Direct discharges from two brackish water canals.
- (4) Direct discharges from glass bottom and fishing boats anchored in the area and
- (5) Storm water drain outfalls which spill rainwater and general runoff from the highway and surrounding areas.

The Hikkaduwa river and the Mawakanda canal close to the Coral Gardens Hotel, release polluted water to the marine sanctuary. These waters are highly polluted as they indicate high coliform counts, nutrient contents such as nitrogen, phosphate, high BOD levels and bacteria.

All hotels except the Coral Garden Hotel release their effluent on land (De Alwis 1994). Coral Garden Hotel reports of having a treatment plant for liquid wastes. All the other hotels have soakage pits and septic tanks. Ground water and beaches get polluted by seepage from septic tanks and overflowing particularly during the rainy season. Septic tanks that are not properly maintained, pollute ground water. Further, a large number of guest houses deliberately pump sewage to coastal waters (Table 2).

Most of the lagoon reefs lie at a depth of from 4 to 33 metres. The abundance of reef fish and the diversity of reefs have become a great asset. A large number of glass bottom boats are used by both foreigners and local tourists to view corals. Strict competition amongst boat owners to attract tourists, and the haphazard manner of sailing boats on coral reefs, contribute largely to the destruction of corals. Anchoring of boats and discharge of oil,

LOCATION OF TOURIST ACTIVITIES IN THE HIKKADUWA D.S. DIVISION



grease and other pollutants from fishing boats walking on coral reefs, cause further destruction to coral reefs. Corals have been damaged due to heavy visitor pressure operation of glass bottom boats, polluted water from hotels and siltation from upper reaches of rivers. All these adverse activities have increased proportion of dead corals in the area from 77.9 percent in 1995 to 86.8 percent in 1994.

**Table 2: Potential Pollutant Loads from Hotels on the Beach Environment of Hikkaduwa (De Alwis *et al.*, 1994).**

Month Year 1993	Total number of guest nights	BOD Kg/day	Phosphate Kg/day	Nitrogen Kg/day
January	23068	14.53	1.08	5.38
February	21452	13.5	1.0	5.0
March	21543	13.57	1.005	5.02
April	13022	8.2	0.61	3.04
May	9149	5.76	0.43	2.1
June	7367	4.64	0.37	1.72
July	6168	3.89	0.29	1.44
August	14338	9.03	0.67	3.35
September	11835	7.46	0.55	2.76
October	11239	7.08	0.52	2.62
November	15168	9.56	0.71	3.54
December	19945	12.6	0.93	4.66

Over dependence on tourism and development beyond carrying capacity are unhealthy aspects for sustainable development of tourist industry in the Hikkaduwa D.S. Division. Several interrelated factors have contributed to this phenomenon.

### **5.1 Non-availability of suitable land resources for agricultural activities.**

(a) The total extent of the Hikkaduwa D.S. Division is 16,272 acres and of this 662 acres comprise inland water bodies such as Madampe wewa, Hikkaduwa lagoon and Athgama lagoon. The total population of 860,765 persons is unevenly distributed in 97 Grama Niladhari Divisions. As a result the average population density in rural areas is 426 per sq. Km, only 11 per cent of the population is considered as urban. The increasing rural population is unable to find livelihoods depending basically on agricultural activities. The present land use types in Hikkaduwa D.S. Division show that there are 44 percent of coconut lands, 32 percent paddy, 9 percent cinnamon, rubber 8 percent and other crops 7 percent.

(b) The general characteristics of soils are also not conducive for intensive agricultural activities. The major soil groups in the Hikkaduwa D.S. Division are sandy soil, saline soil, red yellow podsolic soils, and swamp soils.

(c) In certain areas the quality of ground water is not quite favourable for crop cultivation. Water with high salinity levels is a constraint crop cultivation even where land is available.

(d) Another factor which prevents agricultural activities in the Hikkaduwa D.S. Division is the presence of large pits that have been dug for extraction of lime. Up until 1990, of the limestones produced in the Hikkaduwa D.S. Division, 60 percent was extracted from the coastal strip and the balance 40 percent from inland deposits. Lands in Madampe, Panwewa, Urawatta, Warallana, have been badly affected due to mining of inland coral deposits.

(e) The gradual degradation of the quality of paddy lands is also a contributory factor for diminishing interest in agricultural activities in the Hikkaduwa D.S. Division. Some of the lowlands located in close proximity to Hikkaduwa ganga, Talwatta ganga, Rathgama Lagoon, and delta areas have become unsuitable for paddy cultivation due to intrusion of saline water.

(f) Lack of infrastructure facilities to pursue animal husbandry, attracted many people to tourist industry. Lack of veterinary facilities and milk collecting depots discouraged many people, who even understand the economic value of animal husbandry particularly cattle rearing. Today only 6 per cent of the entire households engage in animal husbandry and poultry farming.

(g) Hikkaduwa D.S. Division is naturally endowed with fish resources and facilities to anchor fishing craft. Some of the important marine fishing centres in the Hikkaduwa D.S. Division are Telwatta, Paraliya, Unawatuna, in the northern sector of Hikkaduwa and Pitawella, Dodanduwa, and Hikkaduwa in the southern sector. Inland fishing is practised in Rathgama lagoon, Hikkaduwa ganga and Madampe ganga. Both marine and aquatic resources are practised by following traditional methods and crafts. Traditional fishermen as well as fishermen in the younger generation are unable to make a comfortable living by indulging in fishing activities.

## **5.2 Under utilization of resources that are of potential industrial value**

Industrial sector is not adequately developed to compete with ever expanding tourist industry in the Hikkaduwa D.S. Division. There are some villages that produce industrial goods on the basis of cottage industries. Table 3 shows the raw material base and the relevant producing centres in the Division.

In addition to the above socio-economic factors management of natural resources suffers from a variety of institutional inefficiencies.

Tourist development plans, programmes, and projects of the public and private sectors have failed to incorporate a component on environmental impacts into their activities. This is particularly evident with the location pattern of some of the resorts in Hikkaduwa, where the average distance from the buildings to the coast line is less than 50 metres.

Table 3

Raw Material	Industrial Product	Industrial Centre
(I) Coconut coir	coirbags	Akurala, Kahawa, Godagama, Madampe, Uruwarawa.
	coir brushes	Pitiwala, Boosa, Hagoda
	coir brooms	Rathgama, Dodanduwa
	door mats	Pitiwala, Boosa, Wallabade
	coir and coir ropes	Pitiwala, Boosa, Rathgama, Dodanduwa, Waraliya, Telwatta.
(II) Copra	Coconut oil	Galle (mills)
(III) White Coir	(for export)	Wenamulla, Dimbuldoowa
(IV) Wetakeyya	Mats, Carpets Purses, Travelling bags	Panwila, Thiranagama, Waralla. Pannangoda, Nalagasdeniya
(V) Cane	raw material transported from Ampara, Embilipitiya	Boosa, Pitiwala, Overkanda, Kapumulla, Rathgama
(VI) Empty Tar Barrels	bowls (for monks)	Panvila, Thiranagama, Nalagasdeniya.
(VII) Wood Carpentry	Window frames, doors	Hikkaduwa

Source: unpublished data - Hikkaduwa D.S. Division 1996.

Strict regulations are needed to prevent environmental pollution causing by the private sector establishments. Some of the Acts which were in force during the colonial era have not been amended to suit the present socio-economic conditions.

Multiplicity of government agencies and poorly co-ordinated environmental management responsibilities have exacerbated some of the environmental problems in the Hikkaduwa D.S. Division.

Tourist industry has been developed on a haphazard manner. Location of tourist industry is not been based on sufficient information on environmental carrying capacity of the area.

#### **6. Some Suggestions for the Sustainability of Tourist Industry in the Hikkaduwa D.S. Division**

The overall objective is to develop and implement a local level resource management plan to facilitate sustainable tourist industry. The effectiveness of the programme depend on the active participation of the government agencies and community groups. The importance of community participation in the implementation of management strategies should be stressed in future development plans. Such an approach can result in effective resource management as well as tangible benefits to be derived by the community.

In order to sustain tourist industry the adverse environmental impact should be prevented or mitigated. Some suggestions for the sustainable development of tourist industry in the Hikkaduwa D.S. Division are as follows.

#### **(A) Development of alternative employment avenues to minimize pressure on tourism**

- (I) As long as income levels are low, with no immediate prospects of alternative earning opportunities, people will go for tourist industry in the Hikkaduwa D.S. Division. Alternate employment opportunities should be explored by evaluating available natural resources.

The development of marine fishing is one of the potential avenues where employment can be generated. Lack of storage facilities and inability to preserve fish have discouraged many from taking into fishing industry. A fisheries development plan

in the Hikkaduwa D.S. Division should give high priority for the provision of mechanized crafts, installing storage facilities, and training centres for youth in activities related to fishing industry.

- (II) Maximum utilization of coconut based raw materials is another promising way of providing employment opportunities in the Hikkaduwa D.S. Division. Since 44 percent of the cultivated land is under coconut, plans should be drawn to establish collecting centres for copra, white coir, coir products and oil mills. The coir mill at Dodanduwa has proved to be a successful venture. An efficient industrial plan with incentives and suitable technology would undoubtedly provide employment opportunities thereby reducing the need to depend entirely on tourist industry.
  
- (III) Additional income sources can be generated by providing infrastructure facilities to improve animal husbandry. Some of the degraded or unproductive paddy lands can be used for cultivation of fodder for cattle. Veterinary facilities which are lacking at present should be installed to meet the increasing demand. Poultry farming and rearing of pigs are gradually becoming popular as these activities which do not need much land. Meat, eggs and milk are some of the items that are likely to fetch higher prices within the Hikkaduwa D.S. Division as the daily demand from guest houses and hotels is high.
  
- (IV) Carpentry, wood carving and production of souvenirs are some of the income generating activities that can be sustained in the Hikkaduwa D.S. Division. Raw materials, skilled labour and market facilities are available in many Gramasevaka Divisions in the area.

**(B) Sustainability of Tourism by proper Management and conservation of tourism related resources**

- (I) Sustainability of the tourist industry depends basically on the ecological carrying capacity of the tourist locations. Some of the Grama Sevaka divisions such as Kahawa, Godagama,

Totagamuwa Hikkaduwa west, Thiranagama Narigama Dodanduwa are over dependant on tourist activities. Areas where resources are over exploited should not be considered for future development. Table 4 shows the expected tourist arrivals by the year 2000. The facilities required by these tourists should be met by areas with less tourist activities.

- (II) A close co-ordination should be established amongst tourist related organizations to sustain environmentally friendly tourist industry. Sri Lanka Tourist Board should work in close co-ordination with relevant Pradeshiya Sabas, Central Environmental Authority, Coast Conservation Department, Urban Development Authority, Road Development Authority and the relevant institutions.

**Table 4: The Optimal Targets.**

	Actual		Targets
	1991	1996	2001
Arrival (by air)	317,703	528,500	874,200
Nights Millions	3.6	5.5	8.2
Length of Stay (Nights)	11.4	10.4	9.4
Receipt US \$ Millions	156	312	706
Hotel Rooms	9,679	14,365	18,953
Employment	64,507	91,238	136,574
Arrivals by sea	-	-	100,00
Cruise ships	-	6,400	9,600

**The top 10 generating markets are -**

Germany	-	134,100	arrivals.
Japan	-	112,400	"
United Kingdom	-	88,300	"
France	-	75,300	"

India	-	74,300	“
Italy	-	50,600	“
Scandinavia	-	34,400	“
Netherlands	-	25,500	“
North America	-	24,800	“
Australia	-	19,900	“

These 10 markets will generate 73 per cent of the targeted arrivals by air in the year 2001. South East Asian markets are expected to generate 74,000 arrivals. Business traffic including meetings is targeted at 100,000 arrivals.

*Source : Sri Lanka Tourism Master Plan. 1992-2001 Ceylon Tourist Board - 1992.*

- (III) Proper plans should be adopted for the disposal of solid waste. Generation of solid waste from hotels, guest houses, and tourist resorts are high during the peak tourist periods, i.e. from November to February. The Hikkaduwa Pradeshiya Saba should have provisions to employ additional staff in the labour grade to keep the environment clean particularly during the peak tourist season. Additional waste dumping grounds should be provided to meet the seasonal demands.
- (IV) Disposal of untreated sewage to water bodies has become a major threat to the environment in the Hikkaduwa D.S. Division. Hikkaduwa Lagoon and some rivers in the vicinity have become dumping grounds for untreated sewage. Local and regional authorities should have an efficient plan and monitoring system to prevent further depletion of water quality in the Hikkaduwa D.S. Division. It is suggested that a central sewage treatment plant should be install in Hikkaduwa linking major hotels and large guest houses.
- (V) A high proportion of medium and small guest houses, tourist restaurants and hotels in the Hikkaduwa D.S. Division are owned and managed by the local residents. An effective

participation of the people is vital for successful development of tourist activities. Local people should be encouraged to participate in managing and protecting resources in the area.

- (VI) Environmental Impact Assessment procedure should be closely followed in establishing new tourism related activities in the Division. In the Grama Sevaka Divisions such as Narigama, Thotagama, Hikkaduwa, addition of new tourist establishments can cause several distraction to already disturbed environment. It is clear that the Hikkaduwa Pradeshiya Sabawa should carefully evaluate the proposals and development plans pertaining to tourism in the future. New additions should not be encouraged that will increase pressure on existing tourist centres.

## Conclusion

Tourism is an important economic activity which will bring numerous economic benefits to Sri Lanka. Sustainable development of tourist industry in the Hikkaduwa D.S. Division is a vital component for the survival of the tourist activities in the whole country. An environmentally friendly tourist activity can be achieved by providing income generating activities outside tourist industry in the Division. Similarly, immediate solutions should be provided to the existing environmental problems that have emerged during the past two decades. The management and conservation of tourist resources in the Hikkaduwa should be treated as two vital aspects of a sustainable tourist industry in Sri Lanka.

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