



# Trends, Environmental Issues and Challenges of Ecotourism in Sri Lanka

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## **Abstract**

*Ecotourism industry is growing and changing at a fast pace. It is an increasingly important source of income, employment and wealth in many countries. According to the World Tourism Organization, ecotourism is recorded as the highest growing market in the tourism industry with an annual growth rate of 5 per cent worldwide and representing 6 per cent of GDP and 11.4 per cent of all consumers spending. Sri Lanka has tremendous ecotourism resources with great potential for further development in Southern Asia. At present tourism industry with ecotourism sector is a major foreign exchange generating industry in Sri Lanka. Since 2005, the sector of ecotourism has been developed under the policy decisions and legal coverage of tourism act No. 38 of 2005 which came into effect in October 2007. Even though, there had been little enhancements and positive trends in ecotourism profile, the negative feedback and common ramifications are also distinguished in the ecotourism process in Sri Lanka. This is identified as having some negative impact, issues, trends and challengers to reach the realistic ecotourism process and to implement the planned strategies in entire Sri Lanka. This paper aims to discuss the above mentioned issues with the help of extensive and comprehensive literature reviews on ecotourism. Ecotourism trends delineated in this article are based on the ancillary statistical data from 1990 to date and issues and challenges are discussed within the three categories: culture, economy and environment.*

**Keywords:** *Ecotourism, trends, issues, challenges, Sri Lanka.*

## **INTRODUCTION**

Ecotourism is a subset of broad nature based on tourism that includes several components like community benefits, education , sustainability and ethics (Goodwin 1996; Brandon 1996; Honey 1999; Fennell 1999; Buckley 2004).

“Ecotourism involves visiting natural areas with the objectives of learning, studying or participating in activities that do not bring negative effects to the environment; whilst protecting and empowering the local community socially and economically”. (Cristina, 2004). Between 1990 and 1995, world eco-tourism had grown



by 30% while conventional tourism has grown only by 8% during the same period. The WWF estimates that eco-tourism industry accounts for nearly a quarter of total tourism earnings in developing countries (Anon, 2003).

Tourism industry in Sri Lanka dates back to 1960's and has grown steadily over the years. At present it is one of the major foreign exchange generating industries in Sri Lanka and nearly 150,000 people directly or indirectly depend on the industry for their livelihood. Tourism in Sri Lanka initially focused on beach tourism. However, later on tourism sector managed to diversify its products and services to be capitalized on Sri Lanka's rich nature and culture.

### **OBJECTIVES OF THE STUDY**

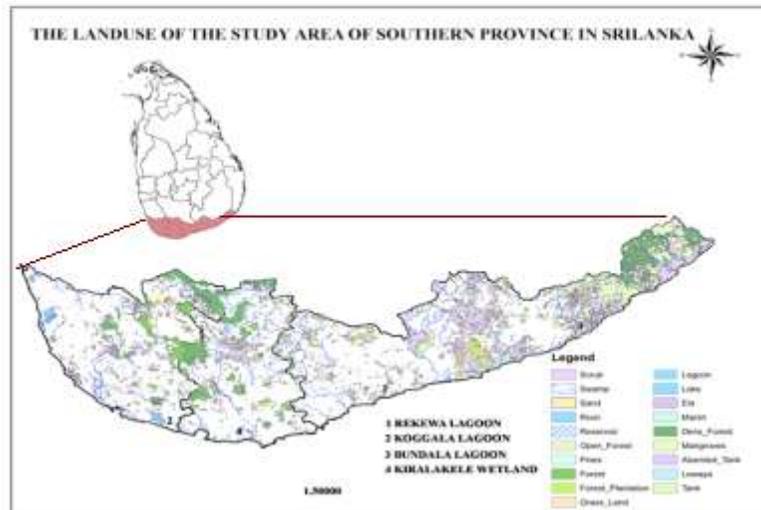
1. The main objective of this study is to identify and examine the potentiality of ecotourism development in the coastal wetlands in the southern coastal belt of Sri Lanka;
2. To identify the issues and challenges of the ecotourism development in coastal wetlands.

### **STUDY AREA**

The island Republic of Sri Lanka is located in the Indian Ocean, southeast of India, between 5° 55' and 9° 51' N latitude, and 79° 41' and 81° 41' E longitude. Its area is approximately 65,610 square Km, with a coastline of about 1,620 km. (Wikipedia, 2010) (See figure 1). The central and south central regions are highland and mountainous, while the rest of the island is mainly flat. The climate in Sri Lanka is tropical and monsoonal, but varies from warm in the coastal plains and lowlands to temperate in the hills and mountain regions (Wikipedia online, 2010).

Sri Lanka has a huge potential resources for the development of tourism which has diverse attraction to appeal the interest of tourists. The country boasts of seven UNESCO World Heritage sites, 13 National Parks, a biodiversity park and 93 other protected natural areas, adding value to an eco-tourism resource based on immense abundance. The coast-based eco asset tourism of the country includes the 24 protected areas bordering the coastal zone (CZMP, 2003), associated with coastal habitats such as lagoons/estuaries, mangroves, salt marshes, etc.

**Figure 1 – Southern Regional Province in Sri Lanka**



In addition, its rich biodiversity hard coral reefs, nearly 1000 species of fish and many other invertebrate species offer unique opportunities for the undersea nature lovers. Oceanic waters around Sri Lanka support populations of whales and dolphins, including the Blue whale and the Sperm whale. offering opportunities for establishing whale watching as a commercial tourist activity. Migrant birds and the marine turtles, which come ashore for nesting, has been supporting enhancement of ecotourism initiatives, particularly in the south.

This paper aims to discuss the trends, issues and challenges of ecotourism sector in Sri Lanka with the help of extensive and comprehensive literature reviews on ecotourism. Ecotourism trends delineated in this article are based on the ancillary statistical data from 1990 to date and issues and challenges are discussed within the three categories: environment, economy and culture.

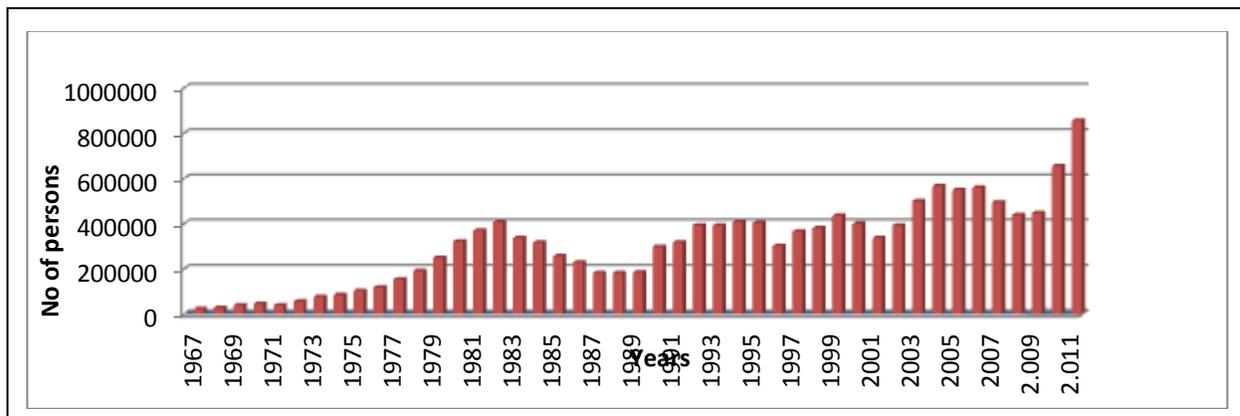
### **TRENDS OF ECOTOURISM**

Tourist arrivals to Sri Lanka during the year 2009 amounted to 447,890 recording an increase of 2.1%, when compared to the previous year. During the first half of the year tourist arrivals decreased by 16.3% mainly due to the security uncertainty which prevailed in the country and resultant travel advisories issued by main tourist generating markets. The liberalization of Northern and Eastern provinces in May 2009 has opened up a new vista for Sri Lanka to march in path of renaissance in tourism. As a consequence of this favourable condition, tourist arrivals recorded a remarkable growth as 21.5 percent in the second half of 2009. Indeed



Sri Lanka is currently experiencing an unprecedented tourism boom. Even though, there has been some fluctuation in tourist arrival from 1967 to 2011, the recent trend has been positively increased (See figure 2). The foreign exchange (FE) earnings increased marginally by 1.1%, from 2008 to 2009. Foreign Exchange Receipts per tourist per day recorded an increase of USD5.1, from USD76.7 in 2008 to USD 81.8 in 2009 (SLTDA, 2009).

**Figure 2 – Recent trends of tourist arrivals by year 1967 to 2011**



Source: SLTDA, Annual Statistical Report, 2011

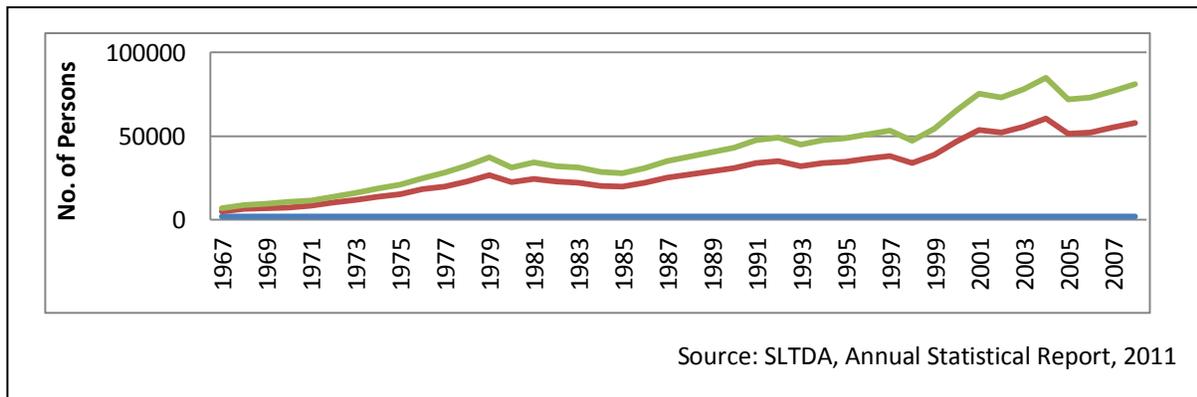
Tourism was moved up its position as the sixth largest foreign exchange venue in the year 2009. Sri Lanka is now promoting tourism under the tourism branding slogan “Sri Lanka: the wonder of Asia”. The economy of the country managed to achieve an impressive rate of growth at around 8 percent in 2010. According to the Economist Intelligence Unit as noted in the government treasury report “Sri Lanka has been ranked as eighth among the top ten fastest economical development countries in the world (Sri Lanka Treasury, 2011). Employment opportunities in sectors of the tourism have increased during the last fifty years. Figure 3 illustrates the trends of employment opportunities in tourism sector from 1999 to 2007.

The post-war figures demonstrate that the Sri Lankan tourism sector achieved the highest number of tourist arrivals and is expected to rise further on as a result of the removal of travel advisory restrictions imposed by various countries due to past civil war. This favourable condition has been further boosted by the improvement of international tourism ratings where Sri Lanka was given splendid outlook by a number of key originating countries. For example, the New York



Times had published “The 31 Places to Go in 2010” and ranked Sri Lanka as a first destination to visit in 2010 (New York Times, 2010). A National Ecotourism Policy Plan is being formulated to promote Sri Lanka as a unique ecotourism destination. In addition, the Institute of Policy Studies (IPS), the research agency, has presented a comprehensive plan to promote and to manage nature tourism in Sri Lanka (Mathews, 2000). To lift the profile of ecotourism, the Ministry of Tourism declared year 2000 as the “Year of Ecotourism”.

**Figure 3- Direct and indirect employment in tourism sector from 1967 to 2011**



### ISSUES ASSOCIATED WITH ECOTOURISM

The impact of ecotourism can be identified under three major categories namely; environment, economy and socio-culture (Wall, 2001). Land degradation, land clearance, erosion, disturbances and biodiversity losses, increase in garbage and sewages, air and water pollution are the severe common ramification generated under the environmental issues. Followings are some of the key environmental issues in the tourism sector identified by the Tourism Development Project in Sri Lanka; pollution due to poor or inadequate facilities to dispose solid waste, waste water and sewerage, generation of large quantities of solid waste, beach pollution caused by disposable material and release of sewage and storm water into oceans, illegal construction of tourist amenities along the beach, unplanned construction of tourist facilities, over development process in coastal excessive demands on power due to unplanned use of electricity, solid waste accumulation at tourist visitation sites and environmental disorder in the various cultural heritage sites (Tourism Development Project, 2005).



Wetland is a remarkable biodiversity hot spot with the direct economic and environmental importance in the eco system and can be used in a sustainable way to highly contribute to the development of ecotourism in Sri Lanka. Large portion of the coastal wetlands have been lost due to landfill for housing, commercial and industrial development, making boundaries to prawn farming and agricultural practices. For example, Muthuraja wela marshes and lagoon wetland areas in Negombo are very famous for the above mentioned activities and tourist destination which is located along the western coast in Sri Lanka. International Water Management Institute (IWMI) has identified and estimated the quantity of sedimentation within the entire area by using satellite data and GIS techniques in 2007. Multi Spectral Land Sat satellite imageries were used to spatially capture changes in and around the wetland area. They highlighted that between the period 1992 and 2002 wetland had been subjected to have changed with the loss of clean water area for 30 per cent, mangrove for 49 per cent and marshes for 40 per cent caused by the sedimentation, infilling, clearing of vegetation and the expansion of human settlements (Rebilo, et. al., 2007).

Encroachment of the exotic species and degradation of the indigenous species are the parallel process of the pristine habitats caused by the human interference in the development sector in the lowland area in Sri Lanka. Furthermore, tourist and the tourist guides make their ways through the original integrated forest profile to get access to their target destinations. As a result, the original forest has been fragmented into several artificial segments and degraded the biological behaviour of the natural ecosystems. A recent study by Thurston and Reader (2001) showed that 500 people had passed over one meter wide lanes substantially and reduced the density of the stem of vegetation and the richness of the species and increased range of exposure of soil. Consequently the small tracks will be expanded and the soil erosion tends to be increased. Yala National Park, the most popular ecotourism destination in southeast coast of Sri Lanka is a vivid example for degradation of vegetation caused by the unmanaged safari strips and transport services through the Yala semi-arid conservation forest.

Sri Lanka has been ranked as the highest among Asian countries for having the greatest percentage of threatened amphibians. It has lost some 20% of its amphibian species during the last century, and over 50% of the remaining species are prone to extinction (IUCN, 2009) Decreasing of water bird population in the wetlands is a devastating impact to the destruction of biodiversity in the coastal belt. Bundala National Park is the most popular nature habitat for water birds and the first Ramsar site wetland in Sri Lanka. The IWMI (2007) and the local partners conducted



a study survey in the seasonal variations of water quality of the Bundala, Embilikala and Malala lagoons throughout the three agricultural seasons. They found some changes in the reference of water quality that the Ph value of the three lagoons ranged between 7.1 and 8.2 from 1999 to 2000. This is due to the agricultural expansion and development activities causing significant drop in salinity level in the above mentioned wetlands which further persuaded decrease in fish and shrimp population (Graziabellio & IWMI, 2004).

Encroachment to the infrastructural buildings and interference of tourists may results in destruction of quality of natural environments. Problems tend to be caused by huge demand for watching coral species by using fibber glass boats. Hikkaduwa coral sanctuary is the most famous tourist destination which is situated in southwest coast in Sri Lanka. The coral habitats and their species have been gradually degraded due to excessive visitation which rendered harmful activities like using thrill crafts and fibber glass boats and harvesting coral debris. Accelerated sea level changes and coastal degradations are the current global issues which have a very close affinity with global warming. Construction of tourism infrastructures such as extra accommodation facilities; harbours, parking areas, roads and conservation strategies in coastal areas have been affected to loss of aesthetic values of natural ecosystems. The Coast Conservation Department (CCD) in Sri Lanka has to build some revetments and groins along the affected coastal sites to against the rapid coastal erosion in south coast in Sri Lanka.

## **FINANCIAL AND HUMAN RESOURCES**

The lack of financial and human resources directly affects implementation of the capital investment and infrastructural facilities in the development of ecotourism. Due to the privatisation of well-trained managers and labours in the field of tourism in Sri Lanka, the government faces certain challenges to maintain the sustainability in ecotourism with proper management and conservation strategies. As highlighted in an industry report, the tourism sector needs five times the current work force to cater for 2.5 million tourists by 2016 (Clearer Skies, 2011).

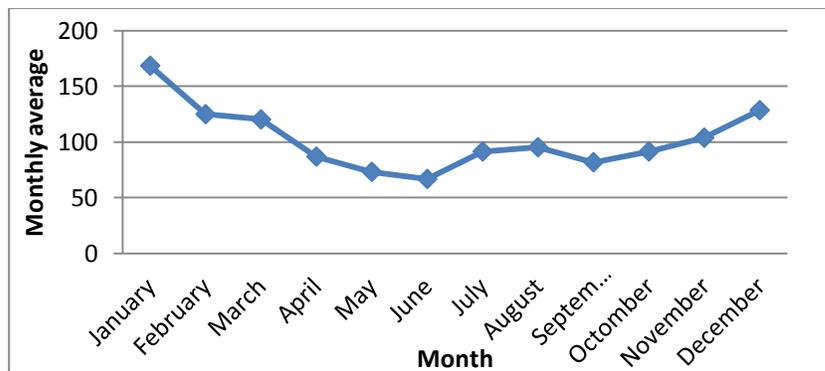
So far, ecotourism field is not so vast; some ecotourism projects have already failed to overcome its efficiency targets due to poor skilful management. For example, The Kirala Kele wetland has failed due to poor implementation and management (Jayathunga, 2009). Iraj Poor leadership and lack of vision are also contributing factors. Good leadership is the driving force behind the success of ecotourism project (Iraj Ratnayake & AzilaKasim, 2004).



## OFF SEASON ISSUES

The peak months for arrivals fall during November/December and the mini peak is in July/August. Most ecotourism destinations are crowded during the main tourism season from November to April in Sri Lanka. The highest number of arrivals was recorded in December, with the seasonal index moving up to 168, recording a 52.3 per cent increase above the monthly average (see figure 4). Huge numbers of hotel owners manage and foster their small restaurant and hotels under the financial facilities from bank loans with high rate of interest. Since they have had an adverse effect on the off season they struggle to cover operating cost and even have to lay off staff in between the seasons.

**Figure 4 – Monthly average of seasonal variation in traffic flow 1967 – 2011**



Source: SLTDA, Annual Statistical Report, 2011.

During these season small industry business such as handy craft productions, local food preparations, transport service sectors and related services getting downward and the employers have to spent their saving money or credit money for their day today requirements.

Poor basic infrastructural facilities and institutional capabilities would be harmful to develop the competitive ecotourism industry in developing country as Sri Lanka. There is a lack of basic tourist service infrastructure for visitors to the most destinations such as, accuracy information and communication centres, accommodation facilities, drinking water, foods stalls and health care centres, toilet facilities. Most effective coastal wetlands are situated near to the remote areas where there is no sufficient water supply schemes and pure drinking water due to alkalinity of soil. Tourist resorts require effective transport links and also need extensive vehicles parking facilities. Moving tourists from



one location to another location within the nation is still time consuming due to poor infrastructure. Recently a ferry service between India and Sri Lanka was introduced. The port infrastructure in the North and the East was severely damaged by the war and rebuilding is necessary in order for tourism potential to be fully realised.

## **CHALLENGES**

To foster a sustainable tourism industry, Sri Lanka is faced with numerous challenges. Natural disasters such as tsunamis, tropical cyclones, ecstastic changes and biological hazards would be devastating impact to retain the coastal ecotourism destinations as an island in Indian Ocean near to Andaman Islands. As forecasted by Geologist, the southern and eastern coast in Sri Lanka is situated in the tsunami risk zones.

Tourism and the natural environment can form a symbiotic relationship (Dowling, 2000). Basic principle of ecotourism should be implemented under the comparative approach considering the economic and environmental profile. But, most of the employees are tend to operate the ecotourism industry by promoting economic approach. Thus, there is a strong case for promoting sustainable form of tourism such as ecotourism as a way of fostering harmony between people and nature through tourism. Indigenous species and wild animals are the attractive biological components to develop ecotourism sector in nature based tourism in Sri Lanka, but destinations of the animal's habitat would be catastrophic challenges to sustainable ecotourism in Sri Lanka. Political interference is a constraint to formulate comprehensive policies and criteria for tourism development in and adjacent to coastal areas heritage sites, ecologically sensitive areas, and national parks. In addition to ecotourism, the Sri Lankan tourism industry is keen to promote other special interest tourism, such as Ayurveda health packages (Local medicinal packages).

## **CONCLUSION**

Sri Lanka is currently experiencing an unprecedented tourism boom and promoting tourism under the tourism branding slogan of "Sri Lanka the wonder of Asia". In 2005, the sector of ecotourism has been developing under the policy decisions and legal coverage of tourism act No. 38 of 2005. In the next few decades tourism will play a potential role in different fields like human resource, economic growth, wealth improvement and productivity. However, the ecotourism in Sri Lanka has many prospects and dimensions; it has been confronted with several issues and challenges threatening the sustainable development of the ecotourism sector. Environmental issues are very



crucial compare to others due to long-term impact from the surrounding Sri Lankan environment. In one hand, there are a lot of challenges on the issues of conservation of nature based resources and cultural heritages and on the other, global economic crisis and financial privations would be the greater challenges in future development of ecotourism sector in Sri Lanka.

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