

Large-scale Ecotourism – A Contradiction in Itself?

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In a large number of attempts to define ecotourism researchers often suggest that one vital aspect of ecotourism is the scale of the operations. Ecotourism, so the argument goes, should be small-scale tourism. This view is often illustrated with a number of negative impacts of mass tourism on the environment and on the host communities. However, this paper introduces the reader to two major players in mass tourism, Europe's largest package tour operator TUI and Germany's second-largest charter carrier LTU. Both are certainly not ecotour operations; however, both implemented a variety of policies and actions, which attempt to keep the environmental and social impacts in the destinations as low as possible. The examples show that positive action can be taken without compromising company operations and customer comfort.

Introduction

A wide variety of researchers and authors attempted to describe and define the term ecotourism. One of the most prominent and most quoted definitions, maybe because it was the first conscious use of the term, came from Hector Ceballos-Lascurain (1987:13), who stated that

we may define ecological tourism or ecotourism as that tourism that involves travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural aspects (both past and present) found in these areas'.

Later on, a variety of researchers stated that ecotourism should be small-scale tourism (Gilbert, 1997; Jones, 1992; Khan, 1997; Lindberg & McKercher, 1997; Lück, 1998; Orams, 1995; Thomlinson & Getz, 1996; Warren & Taylor, 1994; Wheeller, 1994). It is argued that with ecotourism growth it starts to become a mass-venture and the old problems of mass tourism re-occur.

The goal of this paper is to introduce the reader to two large companies, which deal with enormous numbers of tourists. Without doubt both are big players in mass tourism. The first example is TUI's Robinson Club Baobab in Kenya. Club holidays are certainly not associated with ecotourism and the reader might be surprised when reading some facts about this club. The second example is LTU International Airways, Germany's second-largest charter carrier with a fleet of 35 modern aircraft. Air travel is the section within the tourism industry with the worst environmental image (Gwinner, 2001). The two projects 'C.A.R.I.B.I.C.' and 'Ökobeutel' ('eco-bag') of LTU will be introduced.

Robinson Club and LTU do not give themselves the label of an 'ecotourism operator/airline'. However, they are proud about their share in environmentally conscious (mass-)tourism and the awards they received for their commitment.

The Case of the Robinson Club Baobab in Kenya

The brand Robinson Club is a subsidiary of TUI (Touristik Union International). TUI is Europe's largest tour operator with about 12.9 million pax in 1998/1999 (Fremdenverkehrswirtschaft, 2000). In 1990 TUI employed a highly skilled full-time environment-strategy commissioner (Dr Wolf Michael Iwand), who is responsible for a more environmentally friendly development of the company's products. He is head of the 'environment strategy commission' and in direct contact with the board of directors (Kirstges, 1995).

TUI, including the branch Robinson Club, set a variety of criteria for their holiday destinations, hotels and carrier (Table 1). They set up an environmental database, which is used for planning and information in catalogues.

Table 1 TUI's environmental criteria for destinations, hotels and carrier

<i>TUI Destination criteria</i>	<i>TUI Hotel criteria</i>	<i>TUI Carrier criteria</i>
Bathing water and beach quality	Wastewater treatment	Energy consumption
Water supply and water-saving measures	Solid waste disposal, recycling and prevention	Pollutant and noise emissions
Wastewater disposal and utilisation	Water supply and water-saving measures	Land use and paving over
Solid waste disposal, recycling and prevention	Energy supply and energy-saving measures	Vehicle/craft, equipment and line maintenance techniques
Energy supply and energy-saving measures	Environmentally oriented hotel management (focus on food, cleaning and hygiene)	Catering and waste recycling and disposal
Traffic, air, noise and climate	Quality of bathing waters and beaches in the vicinity of the hotel	Environmental information for passengers
Landscape and built environment	Noise protection in and around the hotel	Environmental guidelines and reporting
Nature conservation, species preservation and animal welfare	Hotel gardens	Environmental research and development
Environmental information and offers	Building materials and architecture	Environmental cooperation, integrated transport concepts
Environmental policy and activities	Environmental information and offers of the hotel	Specific data: Vehicle/craft type, motor/power unit, age
	Location and immediate surroundings of the hotel	

Source: TUI (undated)

While these criteria are applied to all TUI products, this chapter focuses on the case of the Robinson Club Baobab.

The Robinson Club Baobab lies in a tropical coastal forest at the Diani Beach, about 35 kilometres south of Mombasa, Kenya. The club comprises 80 double rooms in two-storey houses and 70 double rooms in bungalows. Only 2.5% of the total area of 250,000 m² is built on, and the whole area has been established as a nature preservation park with endemic plants, which are already extinct in other parts of Kenya's coast (Lerner & Hagspiel, 1999).

The architecture

When renovating and redecorating the club, TUI placed emphasis on the use of local materials. This resulted in a typical African architecture with straw-roofed bungalows in an African style, made of coral blocks and mangrove timber. The bungalows have been carefully integrated in the park (Lerner & Hagspiel, 1999).

Rubbish issues

The main goal for TUI is to avoid rubbish rather than to just dispose of it. Robinson Club Baobab does not use any disposable cutlery and crockery. Softdrink cans and beer cans are unknown in the club, too. When supplying the club with food, emphasis is put on low package products. For example, jam, butter and marmalade are not served in small individual packages, but bought in bulk and served in bowls.

When it comes to food, Robinson Club Baobab relies heavily on local supplies. This guarantees freshness and supports the local community. In addition, food is freshly made and the buffet is always served through a cooking station, where every meal is freshly prepared. In the case of leftovers, the club's staff is allowed to take unused food home. Non-usable leftovers are composted in their own device and passed on to those local farmers the club buys their products from. Additional humus is used as fertiliser in the club's gardens (Lerner & Hagspiel, 1999).

Water issues

The club has a need for about 7000 m³ fresh water every day. This is an enormous amount of water, especially in a country with seven rainless months. The club's wastewater is not pumped into wild soak-aways or even into the sea (as is common practice). The club has built their own fully biological sewage system. This system consists of three 30 m by 10 m large ponds, which are used for all wastewater produced by the club (see Figure 1).

Water runs from pond to pond, evaporates and gets cleaned by a special plant (Nil Cabbage) and fish (Tilapiafish). Arriving in the third pond, the water is clear enough to be used to water the gardens. The soil acts as an additional filter and the clean water finally flows back into the ground water system (Lerner & Hagspiel, 1999).

Social issues

Club Baobab is fully aware of the situation of being a guest in a foreign country. The above-mentioned points not only affect the visitors, but also the local community in a positive way. In addition, the club offers a trainee programme



Figure 1 Biological sewage system at Robinson Club Baobab
Source: Courtesy of TUI Hannover



Figure 2 Members of the Trainee Programme at Robinson Club Baobab
Source: Courtesy of TUI Hannover

for young local people. In all departments of the club, young local people are trained (Lerner & Hagspiel, 1999). (See Figure 2.)

The holistic approach

As Europe's largest tour operator, TUI tries to follow a holistic approach regarding the environment. All departments are involved in the process and

trained. Continuous monitoring attempts to establish and keep to high standards. SWOT analyses are repeatedly undertaken and weaknesses identified. For quality control, reports of TUI's tour guides and clients' correspondence are evaluated. In addition, when TUI staff travel on holiday, they get an 'environmental' questionnaire as means of quality control of the product management, local guides and hotel management. Consultation is offered to local hotel owners. Expertise on composting and sewage management, noise pollution and alternative energies, and sources for governmental subsidies are only a few examples of the help offered (TUI, 1993)

The Case of LTU International Airways

With more than 7 million passengers per year and a fleet of 35 modern aircraft (7 Airbus A330-300, 1 Airbus A320-232, 6 Boeing 767-300ER, 15 Boeing 757-200, 6 Boeing 737-700), LTU is Germany's second-largest charter carrier (LTU, 1999a). Already in 1992, LTU added the principle of environmental protection to its company philosophy. Continuous work on reducing the amount of kerosene and thus the amount of exhausts through modernising the fleet is a high priority task. All LTU planes are matching the strong noise regulations of the International Civil Aviation Organisation (ICAO Chapter III, Annex-16-certification). Moreover, LTU obliges their pilots to kerosene and noise reducing start and landing procedures (Immelmann, 1996).

LTU also supports environmentally friendly travel between passengers' homes and the airport. LTU passengers are eligible for a reduced Rail&Fly ticket on the whole German railway net. Passengers flying out of Düsseldorf or Cologne/Bonn (about 50% of LTU's passengers) have the advantage of free use of public transport within these areas. In 1996, more than 250,000 travellers used this environmentally friendly and stress-free service. Finally, LTU connects the two major airports of Düsseldorf and Frankfurt with a daily coach shuttle service, called LTU SKY SHUTTLE (Immelmann, 1996).

LTU also continuously reduces the amounts of rubbish produced during the flights. The majority of goods used on board are now bulk goods. Here alone, LTU was able to reduce about 80% of the produced rubbish. As for the rest of the rubbish, LTU already separates it on board and transfers it for proper recycling at the final destination. The results speak a clear language: Although the number of passengers increased from about 4 million in 1990 to more than 6.9 million in 1996, the amount of rubbish in that period could be reduced from 1093 tons to 824 tons. Taking the increase of passengers into consideration, this is a reduction of almost 50% (Immelmann, 1996). It seems to be a matter of course that LTU also supports environmental research and protection projects in different parts of the world.

The above activities show the variety of LTU's commitment to the environment. However, the focus of this chapter is on two major projects, the C.A.R.I.B.I.C. project and the 'Ökobeutel' ('eco-bag'). Those two projects are unique within the industry.

The C.A.R.I.B.I.C. project

C.A.R.I.B.I.C. stands for **C**ivil Aircraft for **R**emote Sensing and **I**n-Situ-Measurement of **T**roposphere and **L**ower Stratosphere **B**ased on the **I**nstrument

Table 2 Participating partners in the C.A.R.I.B.I.C. project

<i>Partner</i>	<i>Subject</i>
Max Planck Institute for Chemistry (MPI), Mainz, Germany	CO-Concentration, Whole-Air-Sampler
Institute for Meteorology and Climate Research (MK), University of Karlsruhe, Germany	Ozone Concentration
Institute for Tropospheric (IfT), Leipzig, Germany	Aerosol Concentration
GFAS Gesellschaft für angewandte Systemtechnik, Immenstaad, Germany	Coordination of the project/Development of the container system
LTU International Airways, Düsseldorf, Germany	Modifications on the aircraft/Avionics & Technical Engineering/Coordination with Boeing/Certification and test flights
Also joined in the second phase of the project	
Royal Meteorologic Institute, De Bilt, Netherlands	University of East Anglia, Norwich, England
Institute for Nuclear Physics, Lund, Sweden	Max-Planck-Institut für Aeronomie Katlenburg-Lindau, Germany

Sources: Immelmann (1996); LTU (1999b); Hoffmann (2000)

Container and is a project for scientific research on the atmosphere. The 'greenhouse effect', 'climate change' and the 'depletion of the shielding of the ozone layer' became keywords for constantly growing damage of the atmosphere due to emissions from human activities on the earth. C.A.R.I.B.I.C. is unique and under the leadership of Prof. Dr Paul Crutzen (awarded with the Nobel Prize for his research on the ozone layer). Several participating institutes and companies (Table 2) also contribute to this project. The aim of the project is to gain a better understanding of changes in the atmosphere and achieve better predictions about the consequences of global climate changes (Immelmann, 1996; LTU, 1999b).

LTU's Boeing aircraft B767-300ER 'Uniform November' was modified with a probe system and a cockpit control for the container. The container is equipped with measuring and monitoring tools to measure aerosols, ozone and carbon monoxide. Furthermore it contains 12 bottles of 20l content for automatic flooding during flight through the 'whole air sampler', which is fixed at the bottom of the fuselage. This 'whole air sampler' can collect air samples for later analysis in laboratories back in the institutes. The advantage of this system is that samples can be collected during regular passenger flights (Immelmann, 1996; LTU, 1999a).

Since the inaugural flight from Malé (Maldives) to Munich (Germany) on the 5th of May 1997, the modified B767-300ER is employed on a variety of routes throughout LTU's network, such as flights from Düsseldorf to Mombasa (Kenya), Miami, Daytona Beach and Fort Myers (Florida/USA), San José (Costa Rica), Puerto Plata and Punta Cana (Dominican Republic) and from Munich to Malé (Maldives), Colombo (Sri Lanka), Denpasar (Bali/Indonesia) and Mombasa (Kenya) (LTU, 1999b).



Figure 3 The C.A.R.I.B.I.C. Container is loaded on LTU's B767 'Uniform November'
Source: Courtesy of LTU Düsseldorf

The C.A.R.I.B.I.C. project aims to get a better understanding about the physical and chemical processes in the tropopause and the stratosphere. First results show some surprising facts, as shown by the following three examples.

- (1) In November 1997, for example, high concentrations of carbon monoxide (CO) were registered above the Indian Ocean and the Arabian Sea. This high concentration was a result of the extensive forest fires in Southeast Asia in the second half of 1997. Due to the El-Nino phenomena this concentration was clearly higher than in the previous years (Hoffmann, 2000).
- (2) In 1998, an unexpected high concentration of carbon monoxide and aerosols was identified only a few 100 metres above the tropopause. This is clear evidence of the fact that 'polluted air' in the troposphere moves up to the stratosphere. There is only little knowledge about frequency and size of exchange processes between troposphere and stratosphere and this project aims to gain further data about those processes (Hoffmann, 2000).
- (3) In August 1997, high concentration of methane was found above the Indian Ocean. Meteorological investigations proofed that the air masses with a high content of methane above Southeast Asia moved from the surface up to a height of 10,000 meters. There is evidence that this methane was emitted from the extended rice fields in North India and China. These results show that processes on the ground have a clearly higher influence on higher atmospheric layers than the emissions of today's air traffic (Hoffmann, 2000).

LTU and the associated institutes continue research with the C.A.R.I.B.I.C. project and more results are expected subsequently (Figure 4).

The Ökobeutel ('eco-bag')

The Maldives is a state comprising 1200 islands (202 inhabited) and 19 atolls (Preuss Touristkinformation, 1995). The Republic is heavily reliant on tourism



Figure 4 The C.A.R.I.B.I.C. Container in the Body of the B767
Source: Courtesy of LTU Düsseldorf

and is a paradise for watersport lovers. Owing to the geographic state of the country, waste disposal is a severe problem. The small islands do not offer the opportunity of waste dumps and most of the waste is dumped into the open sea. LTU alone is generating almost 20% of the total inbound tourism to the Maldives (Hoffmann, 2000). Due to these high numbers of visitors, LTU took over the ecologic responsibility and started a new programme in 1993. Flight attendants hand out 'eco-bags' to every passenger on LTU-flights to the Maldives. They ask the tourists to collect all inorganic waste during their stay and bring the bag back to the airport at the end of their holidays. At the check-in LTU staff take care of the bags, and after sorting the bags they are loaded in special containers and flown out of the country back to Germany (Figure 5). In Germany the waste is finally transferred to recycling stations for recycling or proper disposal (LTU, 1999b). Over the first six years of the programme LTU distributed more than 300,000 eco-bags and about 80% of all passengers participated in the programme. The result is an amount of more than 400 tons of rubbish, which has been flown back to Germany instead of being dumped into the ecological sensitive ecosystem of the coral reefs. Subsequently, LTU was awarded with the 'Green Palm Tree' of the renowned tourism journal *GEO Saison* in 1996. In 1995, LTU received the governmental conservation award by the President of the Maldives (Hoffmann, 2000; Immelmann, 1996).

Related to the eco-bag project is the 'Clean up the Reefs' scheme. Once a year, divers from the world's largest diving organisation PADI in co-operation with LTU clean the coral reefs around the hotel-islands of the Maldives. The collected rubbish is brought to Germany by LTU for adequate disposal or recycling. PADI awarded LTU with the conservation award AWARE in both years 1995 and 1996 (Immelmann, 1996; LTU, 1999b).



Figure 5 Happy tourists checking in their 'Ökobeutel' after their holidays in the Maldives

Source: Courtesy of LTU Düsseldorf

Conclusion

It is often argued that ecotourism is working with small-scale operations only. This chapter introduced two major players in 'megamass tourism' (Wheeller, 1994: 652). Neither of the companies use the label 'ecotourism' for more effective marketing. However, it is fair enough that they are proud of their commitment and the received awards. It was clearly shown that it is possible for large-scale ventures, such as a large tour operator or a charter airline, to operate according to a code of conduct. Compliance to (self-set) regulations is strictly enforced and contributes to a better environment not only at the destination. Taking responsibility means investing in the future and in the host communities. It also comprises taking action and active support of vital research for a better understanding of the impacts tourism has on the host communities and the environment in general.

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