

Winning Challenges: Eco-Tourism Promotion

Kandalama Heritage Hotel in Sri Lanka

PO Box 11, Dambulla, Sri Lanka

(1) Challenges at the Beginning:

. When hotel project was conceived in 1992, there was significant consultation with the local community. Initially the development met with much public debate as many people living in the relatively pristine and undeveloped region were opposed to any tourism development as the area is one of the most significant regions in the country for wild life. As a result, there were objections voiced against its constructions at the selected site. It would be detrimental to wildlife(plants & animals) in the area. It would draw on the water of the adjoining Kandalama tank and reduce the quantity available for the farmers of the area. There would be pollution of the waters of the tank and of the surroundings in general. The foreign guests would corrupt the unspoiled villagers who live around the hotel, by inter alia introducing a drug culture and preying on them sexually.

At one point, it is said that heat was so intense telling that the developers were seriously considering cutting down their losses amounting to millions of Rupees and abandoning the venture. There were some court cases also against the construction but authorities concerned were managed to settle them amicably.

However, the developers took the communities' concerns to heart and instead of fighting with them decided to embrace them, which led to the design and construction of one of the most environmentally friendly hotels in the planet. Ultimately, amidst a range of objections approval was given to construct the hotel which was opened for business on June 24 , 1994.

(2) Location & Introduction

Nestled at the foot of Mt Ereulagala and Mt Dikkandahena in Sri Lanka is the Kandalama Hotel. Sri Lanka is considered to showcase some of the best examples of biodiversity on the Asian continent. Kandalama's attractiveness and uniqueness lies in its location which is at the cross-roads of different ecological zones that harbour a spectrum of wildlife in the heart of cultural triangle. It is a common place to watch herds of elephants migrating across the plains towards the seasonal tanks.

The Kandalama Hotel was the first environmental hotel project in Sri Lanka. Kandalama's 162 rooms has designed in a way that complements and enhances the natural environment, despite its size. Additional facilities at Kandalama include 3 swimming pools, six food and beverage outlets and daily activities and

entertainment that centre greatly around the beauty of the natural surroundings of Sri Lanka.

(3) Kandalama Hotel's outstanding performance

Its achievements in the tourism industry is reflected in the many awards it has received, particularly for Eco management. In addition to Kandalama being the proud recipient of the first GREEN GLOBE Certified Hotel in Asia, its other achievements include World Travel Market Awards for 'Environmental Company' in 1997, Leeds Green building certification and PATA Green LeafGold Award. These awards show Kandalama's commitment to protecting the natural environment.

GREEN GLOBE CATEGORY: Company

GREEN GLOBE SECTOR: Accommodation

CERTIFIED PERFORMANCE CRITERIA

ENVIRONMENTAL AND SOCIAL POLICY

Although only in operation since 1995, the Kandalama Hotel has won the Green Globe award three consecutive years 1996, 1997, 1998. They have been audited since construction and awarded the LEED Pilot Project Bronze medal 2000 (Green Technologies Inc. Canada). Other awards include: 2000 PATA Gold for the concept of the Eco Park, 2000 Gold medal for environmental commitment from Thomson -the biggest tour operator in UK, World Travel Market Environmental Company award 1997, Sri Lanka

Association the advance for science 1997, and SAGA.s BEST hotel for Food & Services in the South Eastern region. The Kandalama management are also seeking ISO 14001 certification.**SITING**

(4) How the Challenges have been met?

(1) The key environmental issues:

(a) The impact of the initial construction on local forest and scenic beauty as well as wild life

The hotel developers had noted that only a part of the 50 acre –site would be used for the construction of the hotel while portion at the rear would not be built upon. Further a considerable tree planting scheme would be undertaking using indigenous species of trees. They noted that a nursery of a thousand of indigenous plants had already been initiated and a further hundred trees three to ten feet in height would be brought to the site. Moreover, some of the activities which would

be developed for the benefit of the tourists would be nature trails and bird watching walks which contribute to maintain intact the bounty of nature.

(b) Water Usage:

Another set of concerns was regarding the water requirement and usage by the hotel. Mainly the possibility of carrying out the development activities in the catchment area, the possible reduction of water availability in Kandalama Tank and possible pollution of the tank water due to hotel activities.

In order to overcome these objections, the hotel arranged water to be obtained from two tube wells sunk to cover 100 feet which would not be recharged by water from Kandalama Tank . It was observed that the Kandalama Tank has silted over centuries and the bottom clay strata was said to be implementable. This observation was given credibility by the findings that the static water levels in the tube wells and tank were different as were the chemical compositions of the water sample drain from each.

Rainwater collection tanks have been introduced at Kandalama with a view to installing more in the future .Low flush toilets and fixtures. Wastewater generated by the hotel is treated and recycled within a modern and well-maintained on-site wastewater treatment. This is then recycled for watering of the hotel compound.

Grey water from filters and softeners in the water treatment plant is collected and used to spray the gravel to reduce the distribution of dust. The hot water system of 80 guestrooms using electric heaters has been modified to use steam from the boiler as the heating medium saving 86,500 kWh per year. Electrically heated hot water systems were replaced with solar water heaters saving 80,300 kWh per year.

(c) Challenges of Possible Pollution

As regards the possibility of pollution by sewage effluent, it was noted that none of these would be released to the tank. Two sewage treatment plants were to be commissioned and the design was to ensure that the effluent would be within prescribed standards. In any event, regular monitoring of samples of the tank water directly off shore from the hotel would be carried out by the authorities during and after construction.

- The effects of the Hotel site on natural hydrology and run off patterns
- The discharge of solid and liquid waste into the lake system
- The discharge of waste and operational by-products in the proximate semi-pristine forest system
- The impact on the local community

(d)ENERGY

- The hot water system of 80 guest rooms using electric heaters has been modified to use steam from the boiler as the heating medium saving 86,500 kWh per year.
- Electrically heated hot water systems were replaced with solar water heaters saving 80,300 kWh per year.
- Within the next two years, hotel management expects to meet 40% of its energy requirements through solar energy
- Lamps that are used for more than four hours per day have been replaced with energy efficient fluorescent lamps.
- The replacement of incandescent lamps in all public areas with compact fluorescent lamps has saved 75,000 kWh per year.
 - Key tag activated master switches have been introduced to guest rooms to save energy.
 - Drivers and guides are instructed to have the engines of the vehicles switched off when the vehicle is parked and awaiting the arrival of guests.
 - Bicycles are encouraged as transport and a bus provides a service to travel to town and back which contributes to the reduction of private vehicles and thereby reducing emissions into the atmosphere.
 - Within the next two years, hotel management expects to meet 40% of its energy requirements through solar energy

(e) SOLID WASTE AND LIQUID WASTE MANAGEMENT

- Waste water generated by the hotel is treated and recycled within a modern and well maintained and operated system. This is then recycled for watering of the hotel compound.
- Over the past 8 years since its establishment, Kandalama has managed to almost completely eliminate waste through a state-of-the-art recycling system.
- Kandalama encourages its suppliers to reuse glass bottles and jars for their products. Wherever possible, eco-friendly containers such as clay pots are used instead of plastics.
- Waste paper is sent for producing recycled paper which is used for hotel stationery.
 - Over the past 8 years since its establishment, Kandalama has managed to almost completely eliminate waste through a state-of-the-art recycling system. Recycling into 15 categories
 - Kandalama encourages its suppliers to reuse glass bottles and jars for their products. Wherever possible, eco-friendly containers such as clay pots are used instead of plastics. A tree planting program is in operation utilizing discarded coconut shells as seedling containers.

(f)AIR QUALITY AND NOISE CONTROL

- Bicycles are encouraged as transport and a bus provides a service to travel to town and back which contributes to the reduction of private vehicles and thereby reducing emissions into the atmosphere.
- Drivers and guides are instructed to have the engines of the vehicles switched off when the vehicle is parked and awaiting the arrival of guests.
- No substances generating toxic fumes are burnt within the hotel premises.
- All air-conditioned rooms and public areas are provided with sufficient quantities of fresh air to ensure levels of CO₂ are kept to a minimum. The replacement of incandescent lamps in all public areas with compact fluorescent lamps has saved 75,000 kWh per year.

(g)RESOURCE CONSERVATION

- A tree planting program is in operation utilizing discarded coconut shells as seedling containers. A total of 26 local species are grown this way and replanted around the hotel site and to a network of regional schools which plant then during school planting days.
- Kandalama has been central to the rehabilitation of approximately 230 ha of rainforest.
- Rain water collection tanks have been introduced at Kandalama with a view to installing more in the future.
- Grey water from filters and softeners in the water treatment plant is collected and used to spray the gravel to reduce the distribution of dust.
- Reclaimed wood products used in construction.
- Minimal use of paint. Design includes many natural materials unfinished.

(h)SOCIAL COMMITMENT

- Kandalama provides economic benefits to Sri Lanka and the local community.
- Derives significant income for Sri Lanka and the local community.
- The EcoPark at Kandalama has highlighted the hotel's commitment to sustainable development and to the local community. Initially the project employed over 300 people and generated an income of over US\$500,000 which assisted in increased living standards for locals.
- The EcoPark is used as an educational tool about the environment for local schools groups.

(i) LAND USE PLANNING

- Collaborative partnerships are in development with the Department of Forest Conservation and the Government to declare the forest around the hotel as a Conservation forest.
- The in-house nursery continues to produce indigenous plants for the forestation programme that operates on the 50 acre hotel property and areas outside.
- Collaborative partnerships are in development with the Department of Forest Conservation and the Government to declare the forest around the hotel as a Conservation forest.
- Kandalama has been central to the rehabilitation of approximately 230 ha: of rainforest.

(j) ECOSYSTEM CONSERVATION AND MANAGEMENT

- Kandalama has become an important control mechanism for illegal activities around the hotel site such as poaching, clearing and firewood collection. On the other hand Kandalama Hotel is at the end of a access road and in each case the hotel security staff can ensure that “undesirables” in the form of drug pushers or touts are not permitted to enter the premises, while at Kandalama, such individuals would be noticeable when they make their way along the deserted road. No substances generating toxic fumes are burnt within the hotel premises. No smoking for employees (and guests since Jan. 2001) All air-conditioned rooms and public areas are provided with sufficient quantities of fresh air to ensure levels of CO₂ are kept to a minimum. Moreover, the hotel promotes extensive composting on-site and natural, locally grown food served in restaurants.

(k) Economic Considerations

The direct and the indirect employment and other income earning opportunities created by the Kandalama Hotel Project have positively contributed for the socio-economic development of the surrounding households. It gives on the job training and experience to the village youth, building familiarity with the contemporary quality standards and confidence among themselves which would stand them in good stead when seeking employment further afield and derives significant income for Sri Lanka and the local community. The Eco-Park at Kandalama has highlighted the hotel’s commitment to sustainable development and to the local community. Initially the project employed over 300 people and generated an income of over US\$500,000 which assisted in increased living standards for locals.

Open policy for staff to generate environmental ideas and deliver them directly to environmental management head and environmental education for staff and the community have resulted multiple effects to the society and the neighborhood economy.

More than 300 local people are employed in the hotel and continues to provide work opportunities for the local population

(L) Socio-Cultural Impact

The possible socio-cultural impacts of the hotel project merited serious consideration. Opponents frequently pointed out the ill-effects of tourism caused to coastal areas in the country. The deterioration of the locality, damages resulted from over visitation; developing drug culture and prostitution are given examples. Proponents of the Kandalama Hotel claimed that the characteristics of the tourism development are quite different from the coastal area because the development at Kandalama was a FIVE star hotel and its up market clientele while being relatively more affluent than the average tourists at coastal areas, may reasonably expected to be mature employed professionals.

Another argument is that it is not reasonable to hope that villagers of Kandalama would remain unchanged in this rapidly changing world where information spreads through fast developing information technology, T,V. Radio and Internet etc.

