



Building Green on Green

Interview by Peter Myers

The ecolodge movement is gaining ground. We talk to eco- and landscape-architect Hitesh Mehta about the guidelines he has created to build sustainable properties.



“Hotels are not simply a home away from home,” Robert L. Noble and Greg Mueller explain in a recent article in *Eco Structures* magazine (eco-structure.com). “They highlight and introduce new techniques in structure, architecture and interior design to the masses. With cost advantages and flexible design, the hospitality industry is beginning to embrace this growing trend of sustainable design.”

No one would agree with these sentiments more than **Hitesh Mehta**, a leading authority on both the landscape design and architectural aspects of sustainable tourism facilities. Mehta grew up in the Indian community of Kenya (and many will have followed his professional cricket career there in the 80s), developing a precocious interest in conservation and environmentalism. After

1. **SITE SELECTION** A site should be selected whereby the ecolodge itself would not directly affect the focal ecotourism attractions of the area, or visually compete with these attractions. Look to see if the site has the backing of a mountain or a large land form and flanking hills to either side. These elements will provide a sense of support, enclosure and balance.

2. **CONSERVATION OF SURROUNDING FLORA AND FAUNA** Take into account the area's biodiversity and any specific ecosystems and the site's relationship with any nearby farming or fishery resources, minimising all environmental impact. Whenever possible, develop in previously disturbed sites.

3. **INCLUSION OF INDIGENOUS MATERIALS** Use endemic and previously existing plant communities for elevation, rainfall, topography and soil type. Include plants that are important to the regional culture and integrate them or their products into the daily experience of the visitor.

4. **WORKING RELATIONS WITH THE LOCAL COMMUNITY** Consider organising an initial session with architects, developers, local people and the authorities, so local people feel part of the decision-making process.

5. **WATER CONSERVATION** Use alternative, sustainable means of water acquisition and reduce water consumption: low-flow showerhead sprayers, aerators, and restrictors; flow-control aerators for taps; water-conserving dual-flush toilets; 'dry' composting toilets; waterless urinals; tap-aerators; and night-timed drip-irrigation systems.

6. **CAREFUL HANDLING AND DISPOSAL OF SOLID WASTE/SEWAGE** Regularly sort non-biodegradable wastes (glass, plastics, etc.) for transport out of the protected area, to the nearest dumping/processing facilities. Biodegradable waste can be turned into compost for landscaping purposes around the lodge. Avoid using incinerators as they pollute the air.

7. **ENERGY CONSERVATION** Meet energy needs through passive design and renewable energy resources. Limit the use of air conditioning to areas where rigid control of humidity and temperature is strictly necessary.

8. **CONSCIENTIOUS CONSTRUCTION** During construction, have minimal impact on the natural environment, provide training for workers and require conservation clauses in the contract with the building contractor. Also, the building site should be clean with minimal disturbance to the surrounding environment and it should discourage scavenging wildlife. Use traditional building technology and materials wherever possible.

9. **ENVIRONMENTAL AESTHETIC** Buildings should not dominate the landscape and/or surrounding vegetation, but blend with local physical and cultural environment through form, landscaping and colour, as well as through the use of local traditional architecture. Consider the ecolodge a continuation of a protected area, a forest, or a coastal system, and avoid the barriers that could make it an island.

10. **MANMADE ENVIRONMENTAL FEATURES** Investigate the feasibility of a constructed wetland system should sufficient funds and space on site permit.

11. **CAREFUL INTRODUCTION OF TOURISM** Determine the visitor impact on ecosystems at the proposed site and in surrounding areas. The size and capacity of natural areas should be determined on the basis of limiting certain factors, e.g., the ecological vulnerability of the area; water and energy availability; and space, access and general site conditions, including visual compatibility. Propose tourism activities that benefit local communities and the environment.

12. **FURTHERING EDUCATION** Offer educational interpretive programmes to both employees and tourists about the surrounding natural and cultural environments. Consult with local elders and historians to draw on themes from local culture.



Opposite: Hitesh Mehta reviewing a topography map in a river in China.
Above: Sketch by Matt Lewis, Hitesh's colleague at EDSA, showing a village home in the Wolong Giant Panda Reserve.

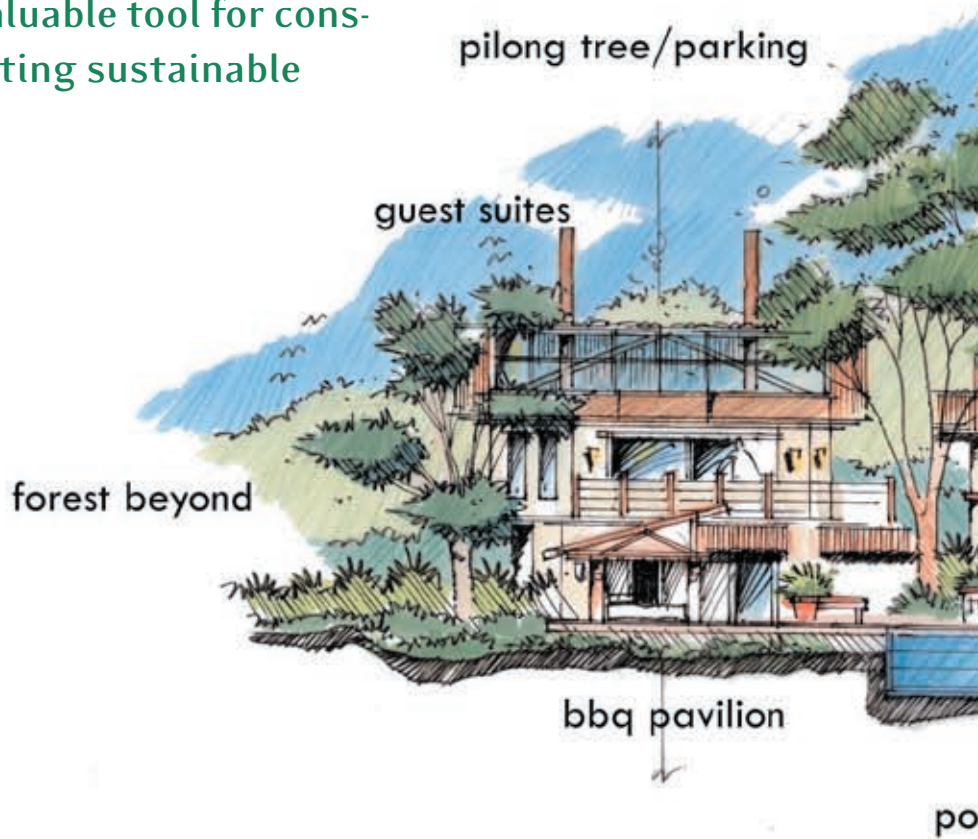
taking his degree in architecture in Kenya, and a Masters in landscape architecture at Berkeley, an academic career as a Professor of the University of Nairobi followed. But, 11 years ago, Mehta decided that he needed to take all his interests (architecture, landscape architecture and conservation) and mix them into one.

“Ecotourism, now five percent of the overall tourism industry, has become one of the fastest growing segments of tourism... [is] a valuable tool for conserving biodiversity and promoting sustainable development.”

HITESH MEHTA'S TOP-TEN RECOMMENDED ECOLOGES,

(In no particular order. Hitesh only recommends lodges that he has visited and verified as authentic ecolodges)

1. **Campi ya Kanzi, Kenya** (campiyakanzi.com) is located between Amboseli and Tsavo game parks. The camp provides tented lodgings within a 400-mile unspoiled private range which looks out onto Mt. Kilimanjaro and can be explored on Maasai-led walking safaris. Conservation efforts have been so successful that black rhino have recently moved onto the ranch.
2. **Lapa Rios, Costa Rica** (laparios.com) has much more to offer than its stunning ocean views and surrounding lush tropical rainforest. Guests here are able to feel that they are doing something good for the planet, as the property provides direct employment and income to more than 45 families in the area.
3. **The Canopy Tower, Soberanía, Panama** (canopytower.com) is a birder's paradise and a paradise for those with a general interest in exploring the tropical forest and Soberanía's extraordinary diversity. Run by nature lovers, the lodge's commitment to conservation is taken very seriously.
4. **Amazonat Jungle Lodge, Brazil** (amazonat.org) lies 100 miles east of Manaus, hidden within 3,500 acres of pristine dry forest containing an unknown number of undiscovered tree and plant species; it is part of the vast Amazonian rainforest. A maximum of 36 guests are allowed here at any time and energy is generated with environmentally-friendly Kohler generator sets in combination with hot water solar systems and Ecoline economic lamps. All vegetables, fruit and fish are purchased from surrounding communities.
5. **The IlNgwesi Lodge, Kenya** (lewa.org/ilngwesi_lodge.php) is situated adjacent to the Ngare Ndare River on the edge of the Mukogodo Hills and boasts commanding panoramic views across northern Kenya. Constructed with materials from the local area, six individual thatched, open-plan cottages ensure fantastic views. The staff involved in the construction and subsequent running of the lodge are all local Maasai and the property has become the role model for upcoming community ecolodges throughout the East African region. (Continued opposite)

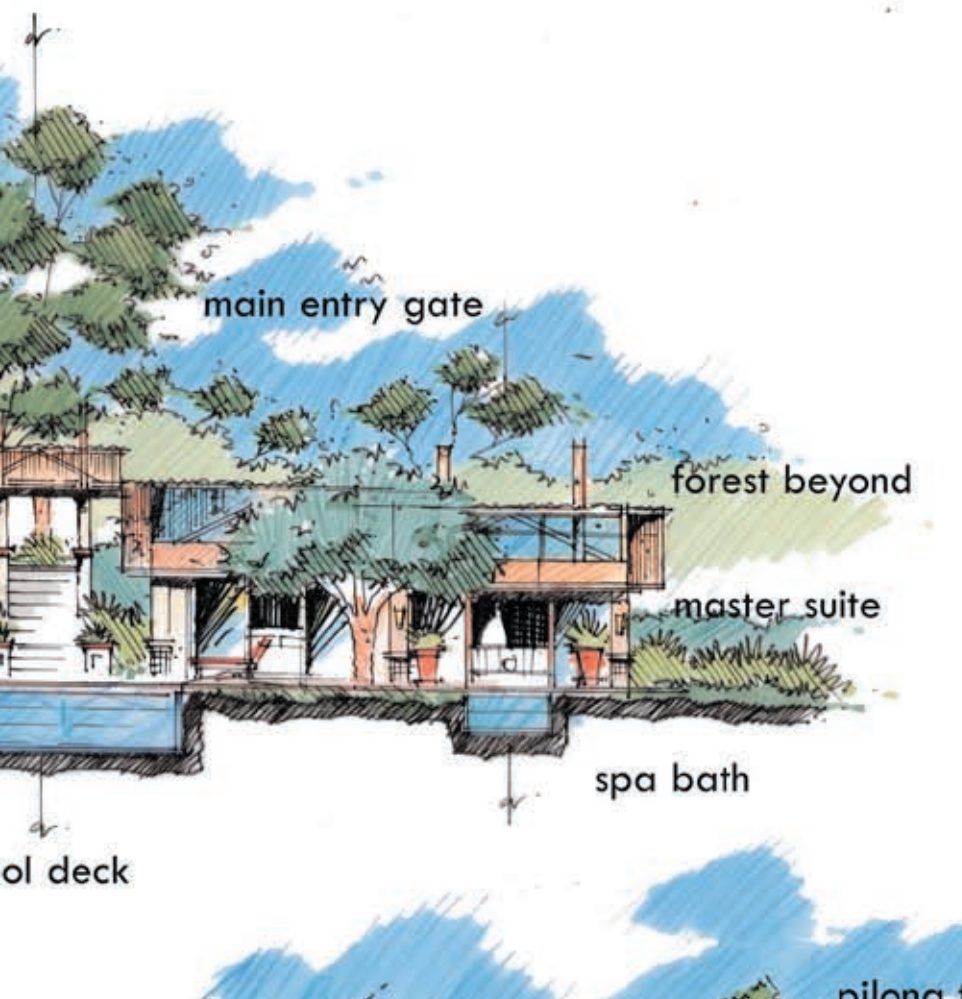


Sketch of a luxury villa at the Menjangan Eco-Resort by EDSA.

After years travelling in Africa and beyond (on cricket tours and academic research trips), Mehta faced a turning point in 1997, when he was asked to be the editor of the seminal *International Ecolodge Guidelines*, a summary of which is on the previous page. Spending five years researching the subject, interviewing people, etc., he found that he was becoming looked upon as an expert on his chosen subject and has since applied the rigorous guidelines to his company's many projects. Nowadays, Mehta is no stranger to international sustainable tourism awards' judging panels. The architect is undoubtedly a global citizen, and describes himself as having a soul from India and a heart from Kenya, but his body lives and works in America. Mehta currently heads the Ecotourism Planning Sector of the world renowned landscape architecture and planning firm EDSA, which is based in Ft. Lauderdale, Florida.

Convinced that there were better ways to integrate sustainability and tourism (protecting both endangered species' habitats and local communities), Mehta noticed first and foremost the striking disconnect between architecture and the landscape on which the lodges were built upon - ugly, modern buildings that were anything but timeless - and asked, "As landscape architects and planners, are we truly the stewards of the land and oceans, or are we destroyers?"

Mehta decided that his calling was to go deeper than simply helping to control the aesthetic features of his projects. Projects in national parks,



for example, would need complicated sewage treatment plans, alternative energy sources and energy conservation methods: “My sacred contract,” he explained to me by telephone during a research trip in the foothills of the Himalayas, “is to make this world a better place than when I found it, to protect particular places for future generations.”

But how much of a difference can Mehta really make given the destructive nature of global tourism? A big one, he says: “Ecotourism, now five percent of the overall tourism industry, has become one of the fastest growing segments of tourism in the world and has proven to be a valuable tool for conserving biodiversity and promoting sustainable development. It always amazes me how many ecotourism projects have mushroomed around the world, especially in Central/South America and Africa.”

Mehta points to the fact that there are now many tourism operations run by local communities. The ‘rustic’ lodges that you would have found 10 yrs ago, where guests had to “sleep on floor mats”, have transformed into five-star luxury, environmentally- and socially-friendly lodges. However, until there are more figureheads like Mehta, either in private sector architecture firms, national tourism boards and hospitality schools, it is unlikely that the ecolodge movement will take over the world very soon - but for everyone’s sake, let’s hope it carries on making headway. 🌱



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6. **Chumbe Eco Lodge, Zanzibar/Tanzania** (chumbeisland.com) can be found on Chumbe Island, between the Tanzanian Coast and Zanzibar, approximately 90 percent of which is covered by one of the last remaining pristine ‘coral rag’ forests in Zanzibar. Accommodation is in ‘eco-bungalows’ which sit on a protected marine area. The lodge also runs an effective educational outreach programme building environmental awareness among local school-children.

7. **Daintree Eco Lodge & Spa, Australia** (daintree-ecolodge.com.au) is just 40 minutes’ drive north of Port Douglas on Australia’s Great Barrier Reef coast and offers unique tree house-style resort accommodation in the heart of the Daintree Rainforest World Heritage region, one of the world’s only remaining low-land rainforests, home to a wide range rainforest flora and fauna including the threatened Cassowary. Daintree works to ensure the area remains protected, while also running several aboriginal cultural programmes (aboriginal techniques are also put to good use in the spa).

8. **Sukau Rainforest Lodge, Malaysia** (sakau.com) is a low-impact lodge built in the longhouse-style committed to the long term sustainability of tourism in the Kinabatangan river basin, but faces the serious challenge of surrounding private land being converted into oil palm plantations. The lodge has a detailed list of published green practices, incorporating both community-reach and environmental practices.

9. **Concordia Eco-Tents, US Virgin Islands** (mah.org/concordia.cfm) is located on the dramatic south-eastern side of St. John. Guests to this high-tech tent property (hand-pump showers, solar-heating, solar over, wind generators, recycled building materials) are taught about recycling upon arrival, while much effort goes into augmenting the water supply by collecting rain water in cisterns, conserving as much as possible and by treating and using wastewater for irrigation. Lateral water lines carry nutrient-rich ‘grey water’ effluent to the surrounding vegetation and to an organic orchard where bananas, oranges, okra, limes, lemons and papaya are grown.

10. **Basata Ecolodge, Egypt** (basata.com); *basata* means ‘simplicity’ in Arabic. The ecolodge is situated near Nuweiba in Egypt. Accommodation is in bamboo beach huts or clay rooms, and the owner, construction engineer Sharif Al-Gharmaway, operates the Sinai’s only recycling plant. Organic produce is grown in a greenhouse using deep irrigation, and responsible tourism initiatives include projects to protect the sea (and coral), the desert and the culture of the Bedouin.