

Solar Lights Up Himalayan Village

In October Earth Garden's editor and two of his sons trekked to a remote village in Nepal to install five solar lighting systems. Each trekker paid for one system, a fourth was paid for by membership fees from the newly-launched Earth Garden Foundation Australia Ltd, and the fifth was paid for by an elderly pensioner who heard about the trip on ABC Radio.

by Alan Gray

Trentham, Victoria

IT'S 4:30 in the afternoon and we're wearily descending a long series of stone steps leading into the small, quiet village of Rabaidanda where Tane, Harry and I will spend the next few days installing five solar lighting systems: two in the village health post/kindergarten, and three in the secondary school. We've had a challenging four day trek through unseasonal rain, heat, humidity and leeches, but have been superbly looked after by our trekking crew and cooking staff.

It's a great sight for us to walk in to Rabaidanda and see the smiling faces of not only the curious local children but also of our friend and fellow solar lighting campaigner, Surya Dhoj Khadka, the Field and Marketing Officer from the Himalayan Light Foundation in Kathmandu, who together with his HLF workmate (and new wife) Shobha, has arranged our trip. Surya and the porters have trekked directly to Rabaidanda with the boxes of solar gear and panels while we've enjoyed a meandering, touristic trek to get here via spectacular villages perched high on Himalayan hillsides under the majestic Annapurna ranges.

We're tired but happy to see Surya and the village and wonder about tomorrow's work: will there be enough wire to place all the lights where the villagers want them, will we be able to easily attach the lights and switches to the walls and ceilings?

I feel relieved that after months of anticipation we are finally at the site where we will install the solar lighting, and I feel elated that my boys are having such a wonderful time. They're both itching to start assembling the solar panels on frames and using — and sharing — the knowledge they gained from our half day training session in Kathmandu where we learned how to assemble and install these simple 12 volt systems.

Camp comforts

Yet again, our resourceful camp chef, the po-faced but amiable Mr Purna (I discovered that if you just keep beaming at him his stern countenance eventually cracks and he'll beam back at you), whips up another dinner feast for us of vegetable soup with fresh coriander, vegetable pakoras, two types of curry, rice, and buffalo cheese pizza, followed by a chocolate cake with icing.

After a hot chocolate to wash it all down, we waddle off to bed in our adjoining tents, and after a sound sleep we're awoken at 6 am with a cup of tea and a bowl of hot washing water. After the fastest breakfast of the trip (porridge, tea, fried egg and chapattis) we bound up the hill to meet the delightful Asha-ji, the health post nurse who we will work with during the first installation. We learn where she would like the lights,



The children at the local kindergarten play happily as the three visitors mill about wiring up their rooms for lights.



Tane (left) and Harry (centre) are ably assisted by the HLF technician, Mr Ram, installing the first of the five pole-mounted solar panels.

Earth Garden Foundation's First Project

This is the first solar lighting installation undertaken via the Earth Garden Foundation Australia Ltd (see the end of this article) in conjunction with its Nepal partner, the Himalayan Light Foundation. The HLF has run similar lighting programs since 1997 and has installed more than 400 systems throughout Nepal. Please visit www.hlf.org.np for more details of their work and programs. The first three lighting systems were paid for by each of the three trekkers, and the fourth solar lighting system was paid for by membership fees from people who have joined the Earth Garden Foundation Australia Ltd since its launch in the spring issue of *Earth Garden*. We now have 30 members and are hoping for 100 by the end of June 2009. Thank you to each and every one of the newly-joined members who made that fourth system possible.

The EGFA, with the help of the HLF, now plans to identify another needy village and supply either more solar lighting systems or possibly a solar-powered computer to a school. The full \$66 annual membership fee goes to funding these projects — no administration costs are paid by the Foundation — all such costs are absorbed by *Earth Garden* magazine. All flights for this trip were carbon offset through www.climatefriendly.com, *Choice* magazine's number one ranked carbon offset company. For more details about joining the EGFA please see the advertisement at the end of this article or visit the webpage at: www.earthgarden.com.au/foundation.

we go through the maintenance of the system, and provide Asha-ji and other interested villagers with some of the training we received in Kathmandu.

Transferring some of the knowledge and skills about the solar lighting systems is a vital part of the project. Asha-ji is one in a network of 13 local nurses and health posts and the new skills and knowledge will one day be passed on to other nurses. The school students who intently participate in the installations also receive copies of the Nepali language manuals and maintenance booklets and we are confident that this will lead to the village people making use of such smallscale technical skills more widely.

And of course we have the able back up of Mr Ram, the solar technician with 13 years experience installing solar power systems from his base at the Pokhara office of Lotus Energy. Mr Ram explains procedures to the local people and he's always there to give us a hand if we get stuck or confused.

Health post installation

Today turns out to be pure magic. We work at the health post/kindergarten from 7:45 am till 5:45 pm and complete both solar lighting systems just on dark. Working as a team of three we assemble the solar panels on their frames then start with the nurse's clinic rooms. One light is wired above Asha-ji's desk, one above her shelves of medicines, and one above the patient's bed in the adjoining room. The fourth light goes outside and all the switches are mounted on the wooden door frames well above the reach of curious children's fingers from the adjoining kindergarten.

Our Leatherman 'Wave' tools prove invaluable: we have one each and the building hums with activity as we strip wires, assemble switches, and go through the Nepali and English language maintenance instructions with more locals.

By 12 noon we have completed one system and we invite Asha-ji to throw the switches for the first time. Everything

School Books Follow Solar-Powered Computer Thanks To Lonely Wheeler Foundation

In the spring 2008 issue of EG we told you about the village of Helesi where EG publishers, Alan and Judith Gray helped install three lighting systems as their trekking buddy, Elsie Walsh, installed a solar-powered computer at the nearby school. On returning to Australia we mentioned (to a visiting musician who'd dropped by for a cuppa) that the school library had not a single book. Nick Thorpe also happens to be a web guru working for Lonely Planet. He said: "Right. I think we can do something about that." After much effort by Nick and his partner Fiona MacDonald, the Lonely Wheeler Foundation has donated the full cost of providing more than 2500 text books to the adjoining school in Helesi. So one school has a solar-powered computer and its neighbour has a library full of text books and reference books where before they had none. Thank you Lonely Wheeler Foundation for your thoughtful and well-placed donation! The photo below shows the principal of the Helesi school receiving the books at the HLF headquarter in Kathmandu from HLF staffer, Mr Surya Dhoj Khadka (right).



works perfectly and we potter down the hill to the mess tent for a reviving lunch of pakoras, rice and a salad. Following lunch the village has arranged a welcome ceremony for us under a huge banyan tree next to the school.

Hundreds of village people and students welcome us with clapping, singing and endless garlands of flowers draped around our necks. The village elders and the school principal make speeches and I respond before we ceremonially hand over some solar panels to the principal.

Tiny children and old ladies clap respectfully and



Rabaidanda nurse, Asha-ji, shows how useful the light will be above her shelves of medicine.

we feel embarrassed to be centre stage when we'd rather be up the hill working on the second lighting system. The boys are shocked and amazed by this powerful and moving welcome and we return to the kindergarten re-energised (sorry).

This afternoon goes smoothly once Tane works out a way to save on wire to allow us to reach the outside kitchen — a small outbuilding with an earth stove that Asha-ji uses when sick patients spend long periods in the clinic.

We finish the second installation with only 1.5 metres of wire remaining from our supply of 35 metres. All the lights work — but only after some merciless teasing of the Old Man by two sons delighted to find that I've reversed the polarity and bolted the black wire from the charge controller to the positive battery terminal. I'll never live it down. Harry fixes my mistake and all the lights come on just as a quiet mountain darkness comes over the village. Asha-ji is grateful and excited.

We stagger down the hill to camp, tired but delighted after a fulfilling day that produces such very tangible results. We've seen some of the 35 kindergarten children playing



From small children to old men — everyone turned out to welcome Alan and his sons to the village.

here today with their three teachers, and we've seen some of the old people shuffling in to see Asha-ji with gifts of fish and homegrown produce. These solar lighting systems will bring immediate and long-lasting benefits to the people here, and what they learn about the installation and maintenance will allow them to extend the usefulness of this project themselves.

After yet another magnificent dinner feast from Mr Purna (there's no way I'm losing weight on this trip) Harry pulls out his resonator guitar and, by the light of the Hurricane lamp, plays a series of Gillian Welch songs that drift into the night air and over the lush green hills. The trip is exceeding all my hopes for a fulfilling adventure with my sons: we've had lots of long philosophical discussions, lots of laughs and we've had a ball working together installing the lighting systems.

The school

Today we install 12 lights for the 250 students and the teachers at the Sri Narayan Lower Secondary School and the principal is delighted. He also has a voltage regulator attached to the charge controller so he can power the school's CDMA desk phone. He explains, via our translator and 'Tour Manager' Surya, that the lighting will be extremely valuable to the school. In the mid-winter gloom, the downstairs classrooms will still have light; the before- and after-school programs can be run with adequate lighting for the first time; the occasional night time cultural performances and late night

exam-prep for the teachers can also be carried out comfortably.

After our day's work, I rest in my tent. Tane, Harry and a group of local boys play soccer and another group of ten year old boys commandeer the foam packing from the battery boxes to improvise a simple game on the grass next to the soccer. I think about how quickly the school facilities have changed: the sun is setting and the roosters are periodically crowing but now the school looks different as three pole-mounted panels stretch from the roofline towards the southern sky like sunflowers straining for the light.

Farewell

We are leaving Rabaidanda today and the local mothers' group insists on giving us a farewell. They make a short speech of thanks and I explain that although we have brought solar lighting we will take back to Australia the village's strong sense of community and its relaxed, happy atmosphere. The colourfully-dressed women garland us with fresh flowers gathered that morning from the surrounding forests, and we have big red tikas plonked on our foreheads, plus generous blessings and wishes of good luck. As the principal shakes my hand for the last time I ask him: "Are you happy?" His eyes are smiling – I will always remember the look in his eyes — as he says almost in a groan: "Ooh. VERY happy." That makes me feel happy too, as we set off down the rocky path away from the village with goodbye calls ringing in our ears.



Two of the three school panels are just visible above the roof of the Sri Narayan school as Alan and his sons prepare to say goodbye to their new friends.