

Exchanging Light For Light

Earth Garden's publishers, Alan and Judith Gray, describe their March 2008 trip with the Himalayan Light Foundation (HLF) to a village in eastern Nepal to replace expensive, polluting kerosene lighting (or no lighting!) with small solar power systems, donated by the Western visitors the HLF trains to install them.

by Alan Gray
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A room full of nuns bursts into applause and Judith and I are so moved we feel like crying. We've just flicked the switch to light up their hall with solar-powered fluoro lights for the first time and, from now on, they can see their prayer books as they chant earnestly, totally focussed on peace and happiness for all living beings. It's a special moment and the air is thick with emotion as we quietly leave the room and move on to check the rest of the systems we've spent three days installing.

We'd arrived in Nepal for this 17 day trip in March 2008 — it's spring in Nepal, with sunny, pleasant weather. At the HLF office in the magical city of Kathmandu we meet the HLF president, Sapana Shakya, and some of her staff, Surya and Shobha, and go through the arrangements for our flight to the Everest region the next day.

But how would we know what to do with the wires, panels and meters in the solar power systems? That afternoon we have a half day training session with a senior technician, Chaitanya, at the offices of nearby Lotus Energy.

Our training session is fun: we examine every component, ask every question under the sun, and then we carefully put everything together until Judith hoists a panel in the air, we flick a switch and the light comes on.

That night Sapana and her staff take us to a wonderful Nepali restaurant for a welcome dinner and we meet Sapana's husband, the founder of the HLF, Adam Friedensohn, who also founded Lotus Energy and then later decided he wanted to see solar power get to people who couldn't afford the services of Lotus Energy.

The next morning we fly from Kathmandu to a bumpy, sloping airstrip and then trek for two days to the village of Helesi. Our job here is to donate and install three simple solar-power systems to light up the monks' school, the nuns' quarters and the monastery.

We're accompanied by an amazing 22 year old from Maine in the US, Elise Walsh, who has raised an enormous sum of money to pay for solar power systems, indigenous medicine and solar water treatments for some of the poorest people in Asia here in Nepal. Elise spent five months last year walking the 4200 km 'Pacific Rim Trail' from Mexico to Canada to raise funds for the HLF.

This awesome fundraising effort means that while Judith and I are installing our three systems, Elise is spending three days at the local Helesi school installing 3 X 85 watt photovoltaic panels on an angled frame, a Fronius inverter, lights and AC power points all connected to a new computer — a first for this school of 1200 students.

On our two day trek to Helesi we get to know Elise and our other trekking mates: Adam, and Lama-la, the beautiful, 51 year old Bhutanese monk who is Adam's assistant, and who just radiates love and compassion from every pore. When we stand near Lama-la we're always overcome by his warm, loving nature — he's like a glowing, spiritual wood heater on a cold night. We three Solar Sisters buddies are accompanied by Adam and Lama-la plus our attentive HLF executive, Surya and our two HLF technicians, Prakash and Bikram.

It turns out that Helesi is located at a very auspicious place: right here is the cave where Buddhists believe the revered 8th century master, Guru Rinpoche (also known as



Sapana, the switched-on President of the HLF, shows Judith the location of some of the HLF's 400 solar installations.



Sapana and Judith drive off in Sapana's purple electric REVA.

Padma Sambhava) and his consort achieved immortality.

Maratika (meaning: liberated from death) Monastery and school are maintained at the cave by the ethnically-Tibetan Sherpa monks and nuns. The head lama, the super-groovy Lama Karma, explains to us that: "... every Buddhist must make a pilgrimage to Guru Rinpoche's long-life cave at Maratika at some stage during their life to seek a long life so they can maximise their benefit to other beings".

The cave is also a major pilgrimage site for Hindus who come to worship once a year at Shivaratri: a two-night festival when Hindus also pray for long life. We had no idea we were heading for such an auspicious place: we just wanted to help poor people make their lives a little easier.

Why solar?

Solar power systems are perfect for a country like Nepal where 85 per cent of the population have no access to electricity — even if they could afford the power bills.

The simple systems we install have been carefully designed by the HLF and Lotus Energy to light schools, medical clinics, community centres and monasteries (which often play the role of school, medical clinic and community centre in the Himalayas).

Each system consists of the following:

- 1 Kyocera 40 watt pv panel
- 1 70 ampour deep cycle battery
- 2 bottles of distilled water for the battery
- 1 charge controller to regulate high and low voltage
- 30 metres of thick, well-insulated wire
- 4x 6 watt, 12 volt fluoro strip lights and shades
- 4x light switches
- 4x junction boxes
- 1 mounting pole and welded bracket for the pv panel
- 1 regulator with selectable output for recharging or running a 12 volt B&W TV, a radio, or other low voltage appliance such as the village mobile phone.
- 1 large packet of assorted screws, nails, brackets, screwdrivers, insulation tape and any other items necessary to complete the installation.

The bare cost of one system is around US\$700 and each Solar Sisters participant pays this (plus US\$900 for travel and administration fees) to the HLF to arrange their nine or ten day trip.

Approaching the village

One sunny day we look down a hillside and in the distance we can see Helesi, the school and the monastery. We walk into the village and straight into a huge reception at the school. We are welcomed by the 1200 students, and many, many garlands of beautiful rhododendrons are placed around our necks. We sit, embarrassed, in the courtyard as the principal, Adam and others make some speeches that leave us close to tears.

The principal, noticing that we cannot follow any of the Nepali, kindly works at making his speech in faltering English. He says:

"Our village. It is a place of poverty. But it is a place of honesty. It is both a Hindu and Buddhist place of pilgrimage — a symbol of religious harmony. Our community is not rich by means of economic things, but by heart we are very satisfied. This is our true welcome from our sacred heart. We hope and pray that the people of all the world will remain peaceful and live happily."

After the speeches the principal shows us the basic classrooms, and then the library.

"But it is a library in name only — we don't have a single book," he laughs, as we stare dumbfounded and embarrassed into the empty room. I try to imagine an Australian school functioning without a single reference book or computer — the contrast is breathtaking. There has been a brilliant postscript to this book story which I will explain in the summer issue of *Earth Garden*.

The installation

Early the next morning, after some young monks have brought us milk tea and biscuits for breakfast, we open the system boxes and check all the components. The batteries get filled with distilled water and we discuss the exact location of switches and lights with Lama Karma and the nuns.

We start on the nuns' quarters and soon fall into a pattern: I like to work unassisted (Judith says that my 'personal space' is as big as a football field but I just say that Nepalis seem to have no such concept!), while Judith and our HLF



Concentrating hard during the training session.



Lama-la and Judith happily chatting and walking on the way to Helesi.

technician, Bikram, work together in another room.

In fact, neither of us works alone for any part of the installation. I work with a brilliant young monk, Lama Zhangbo (see the front cover) who learns how to maintain the system once the HLF technicians leave.

We assemble the panel frame and attach it to the mounting pole, then select a sturdy spot to mount the panel. There is much debate about the exact location of due South and I quietly double-check with the old ‘wrist-watch’ method I use in the Outback. We run cable down to the nuns’ quarters: two lights in their main hall, one in their smoke-filled kitchen, and one in their store room which doubles as a spare bedroom.

For three days we strip wires, and attach light fittings to walls and ceilings. We nail plastic clips with long runs of wire to beams, walls and through ceilings and floors. We both use a ‘Leatherman Wave’ tool and it’s clear that such a multi-purpose tool is invaluable.

Each night we collapse onto our sleeping mats, in a bright airy room in the monastery, exhausted but delighted

that our work is progressing so well. Our friend, Steve Barton, an aid worker rebuilding disaster-affected communities, recently said to us: “Of all things to assist people, it’s light that will make the huge difference. It’s only once you’ve lived without light that you realise how invaluable it is”.

Cultural exchange

Of course, not every minute is spent with a Leatherman in hand. We often have time to sit and talk with Lama Karma and Adam. Also in Helesi that week is a team of Singaporeans led by the charismatic Dr Jason, a Chinese medicine man who conducts free, day-long clinics in Helesi to treat the locals. The energy and compassion of these people is inspiring. Adam is known in Nepal as ‘the solar lama’. We had no idea before we met him that this American-born, Nepali resident of 17 years is also a highly-trained Buddhist lama.

Sometimes, as we work away securing wires, attaching junction boxes, and banging thumbs with bizarre

Adam Friedensohn and the HLF

The HLF has now installed more than 400 systems throughout Nepal. In 1991 Adam founded Lotus Energy: his dream was to bring solar lighting to the Himalayas but it was “business first” with Lotus Energy. The low-cost solar power system seemed like the obvious solution, and Lotus Energy has flourished in a country with a very limited mains grid. But even the low-cost solar system we were installing still represents about a year’s wages for the average Nepali village family.

Adam spoke to a diplomat who asked: “How can we help?” Adam suggested a subsidy to help the village families. The scheme took off and everyone wanted to volunteer for Lotus Energy — Adam received a letter every two weeks. Lotus Energy trained some volunteers but soon realised that this was an unwieldy approach.

So next Adam and his wife Sapana started the HLF in

1997 and later received tax-deductible status in the US. They enjoyed running the HLF so much that they designed other programs including a home employment lighting scheme, solar water treatments, an electric bus project and more. The Solar Sisters program is an enduring success, because it connects Western visitors with local villages and ‘both sides win’. The typical Solar Sisters program costs US\$1600 per person. This includes the US\$700 cost of one solar power system, airport pick up, a welcome dinner, plus guide, local village accommodation and food, hotel at the end of the trip, and even some sightseeing in the Kathmandu valley. It’s the perfect alternative way to get instantly immersed in Nepali life and culture.

“It’s nice to join the two sides of the battery: the haves and the have-nots,” says Adam. I ask Adam what started his interest and he looked puzzled: “Well, who wouldn’t be interested in solar? It just seemed like the perfect thing for this country.”

HLF Founder, Adam Friedensohn, and Judith having lunch in a village inn on the way to Helesi.



Tibetan hammers, it feels like we're in a dream from a Tibetan Shangri-la. One day I am stretching and straining to secure some wire, while all around me, maroon-robed nuns are earnestly chanting Tibetan prayers and the room is filled with an atmosphere of devotion. But I'm terrified that if I move sideways too far, or lose my balance, I'll squash one — or several — of these tiny nuns. Can you imagine the bad karma this would generate?!

Another day, Judith and I are in the main hall of the monastery, which will soon have two new lights to help the pilgrims and locals. Of course, there are no ladders, and in the best *Earth Garden* tradition we are constantly improvising and adapting — even scouring the dusty monastery attic for useful bits and pieces. Judith scans the room and solves the ladder problem: she simply stacks the monks' low prayer tables on top of one another until the rickety pile looks high enough. I gingerly climb the stack to complete some wiring while Judith holds it all steady. Our circus trick works and I climb down with my neck intact.

Celebration

On our last day we go to a 'puja' ceremony to consecrate the solar power systems and to dedicate the 'merit' that flows from the Solar Sisters installation "to all living beings". It is another moving ceremony as Lama Karma, Lama Adam, Lama-la (it's a real lama-fest by now) and the monastery school teacher all make speeches. I explain that despite the gratitude it is we who feel we have much to say thank you for. We have learned many lessons about helping others, appreciating our abundant life in Australia, and the struggles of daily life faced by the poor people of Nepal.

We do the rounds of our installations to check each light, each battery connection and battery. The beauty of these systems is that they are so simple, so there's very little to go wrong. Yet we can see already that they are making a powerful difference to the lives of their new owners.

We slowly leave the anis' room after flicking on their

lights in the increasing gloom. Their clapping rings in our ears. Their smiling faces are full of happiness and compassion. We feel overwhelmed by the emotion of the week's simple and heartfelt exchange. We begin the trek back to the airstrip feeling very happy and very grateful.

- For more details about the HLF's activities visit their website at: www.hlf.org.np. You can also donate a solar power system without needing to visit Nepal: the HLF will install your system for you and endeavour to send you a photograph.

And the HLF's exciting new Solar Siblings program aims to link Western schools with remote Nepali schools to get solar-powered computers into schools, as Elise Walsh did in Helesi.

Earth Garden has decided to assist groups like the HLF by launching the Earth Garden Foundation. See the next page for membership details. In September 2008, EG editor, Alan Gray is returning to Nepal with two of his sons, Tane and Harry, to install three more systems in a village three days walk from Pokhara. Keep an eye out on the EG website at www.earthgarden.com.au for a link to a new web page for the EG Foundation.



Lama Karma flicks the switch for the very first time.