



SeedTree Projects in Progress



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La Selva: the great forest of the Amazon basin is poised to play a pivotal role in regulating the global climate, says the UN Intergovernmental Panel on Climate Change. IPCC, after sharing the 2007 Nobel Peace Prize with Al Gore, identifies the vulnerability of this rainforest to warming

Educational programs, begun in 2006 came to fruition in 2007. The Tulsi Intermediate Science College in Dang, Nepal, commenced classes and experiments in well stocked labs, bringing science to the district. SeedTree had made this donor-sponsored project fit our mission by negotiating that environmental systems science and human ecology education be used innovatively to integrate the natural sciences of biology, physics and chemistry.

and drying (not to mention looming Peruvian “free trade”), among critical climatic scenarios with reinforcing feedback loops capable of precipitating rapid and irreversible atmospheric changes hostile to life on our home planet. Undaunted by the enormity of the task, Adam Stone and his many local allies are making a start with SeedTree. Working



Our interest in developing science curricula got a bright infusion of creative initiative with Evelyn Sanders and Breann Day’s program of outdoor and experimental Science education in



Rio Chico, Ecuador: (upper left on map.) Read more about this project online in Wheaton College Quarterly <http://www.wheatoncollege.edu/Quarterly/Q2007Summer/science.html>. SeedTree was glad to provide some matching and institutional support to Evy and Bree’s innovative initiative. As they shared their conviction that the vital processes of science, observation and experimentation are exciting activities, especially where the universe is the classroom.

with village groups and schools, using tributary rivers of the Peruvian Amazon around Pucallpa as their highway, Adam (with tree-planting schoolboys) and colleague Juan Chavez have begun a promising program of native seed collection and tree planting. Already they have planted 27,000 trees. Children above right eat and save seed to assure a future for this nutritious tamururi fruit and other native forest trees. In consideration of the climate, none of our programs produces more cost effective and far reaching benefits than our **tropical reforestation**. SeedTree will learn from this important new eco-region while sharing the procedures and practices that have proven so successful in Nepal, where Seed Tree Nepal planted over 315,000 trees this year. *Key stages of our tree-planting process right: left to right 1-Participatory assessment of community interest and capacity, based on local valuing of diverse species 2-sewing seed in community nursery 3– planting orientation with mature nursery, 4 out-planting saplings ...Continue on page 2*

SeedTree carried this approach back to Tulsi’s curricular discussions, inspiring a resolve to get the students out of their rows and rote into outdoor field trips. Tulsi’s team added a resolve to encourage a practicum component to apply their learning in social and/or environmental service. Our newly revised edition ...Continue mid page 4...





This process enabled SeedTree Nepal to plant over 315,000 trees in 21 communities in 2007. With peace in Nepal we could visit sites cut off during the wars. One was most encouraging. In 1997, (left) when we first started a nursery and tree planting program there, Budhipur faced drought and severely eroding gullies. Their



hand-carried water source for the nursery went dry in winter. In 1998, above, when Joseph & Carol visited, the year old saplings are barely visible. ..Continued on . P.3



This crudely patched panorama continued on P. 3, doesn't do justice to the 270° view of forest filling the gullies, halting erosion, holding both moisture and topsoil. The man in the grey topi (hat) appears in the older photos as well. He was very pleased with the changes but would not consider thinning this forest. Once they have planted, they are loathe to cut, except pruning for fuel wood and fodder.



In India, we continued mangrove restoration, expanding to ten communities along the coast of Andhra Pradesh, planting 10,000 more mangrove trees (left & right) with Rural Reconstruction Society. Additionally we planted 38,000 of other species participants identified as valuable, bringing the total to 390,000 trees planted in 07 in three countries.



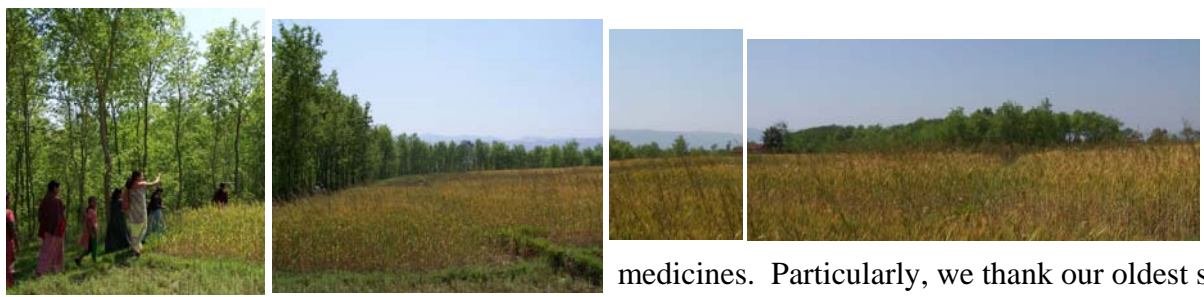
Pongamia (right, center) will produce seeds that contain enough non-edible oil to make biodiesel. The fishermen in these communities, recovering from the 2004 tsunami, venturing again to sea will soon be able to produce their own renewable fuel for their diesel outboards. For those without outboards, we were able to renew the locally extinct sources of the tree, *Albezia Chinensis*, whose light, bouyant wood was originally used to make the simple catamarans



(literally, wooden logs) used to fish or ferry. We were able to collect enough seed from Dang, Nepal to start the seedlings at right and the local recovery of a species traditionally valued on the South Indian coast.

Vijay = Victory! In Dang also we are restoring from local extinction another interesting tree. The Dang Tharu woman, left, shows a family antique, a broken and shaman-shaved, wooden chalice made of *vijaysal*, *pterocarpus marsupium*, a tree that had once flourished, but was no longer found in the valley. In our mid 90s discussions of local species, village women bemoaned the loss of this prized medicinal tree. Water kept in it gains an opalescent blue hue, lowers high blood pressure and acts as a general tonic for longevity. Above right is one of about 40 we have restored, and planted 2500 more in 2007 to assure a future for the species.

Program Manager Ved Bahadur K.C. tells “Now this area is well stocked [7.5 hectare] forest site. Users told ...this Community Forest is habitat of tiger, porcupines, hare and many kinds of birds. Luckily, the tiger do not [do] any harm to local people and cattle. Water amount in that ditch is increased and now perennial.... This CF [...had] no illicit cutting even in the time of conflict. “An old vision, deemed unlikely in the mid-90s, that this area could link forest fragments, providing a corridor for endangered wildlife in adjacent districts, now seems within reach. In Chitwan too our extensive tree-planting activities were concentrated primarily around enhancing a vital wildlife corridor called Brandhabar, passing through the residential valley, linking



forested ridges called Churia in the south to the higher hills called Siwalik in the north.



Bishnu Kumar prunes roots of

Sygyium cumini seedlings outside Seed Tree Nepal’s (STN) central office in Chitwan. This black plum called jamun was collected from wild trees in Banke. *Jamun* is valued for its flavor, purple coloring, and for treating diabetes. It is also held sacred. I met a students bringing soil from the site where his grandfather, ignoring taboos, once cut a *jamun* tree, precipitating a series of misfortunes. I suggested there could be no better rite of atonement than to replant one or more new trees. STN is helping many do just. Already most had been promised, *gratis*, to youth groups and to Machan Wildlife



Resorts. During Tom Hammett and Carol’s visit to Nepal last spring, Tom arranged for interaction with Machan through Sarad Shrestha, who hosted dialogues between SeedTree and community stakeholders in two Chitwan Resorts. These expanded our program

further east and added perspective on the silvo-pastoral interface, as grasslands are so vital to the rare and beloved mega-fauna of the region. We are grateful to all our supporters who recognize the efficacy of reforestation to serve so many environmental ends, while giving people food, fodder, fuel, timber and

medicines. Particularly, we thank our oldest supporter, the socially and environmentally responsible **Working Assets (newly renamed Credo)**, for a grant of \$3900, continuing their commitment to plant 17 trees for every ton of paper they use. With the generous support of Kate Kinley Gregg matched by that of the Anderson-Rogers Foundation, augmented by our new

celebrity donor, Rachel McAdams and many supporters, we were able to complement our extensive tree-planting with a well integrated program of human ecology education and practice with SeedTree Nepal.

In Chitwan, we held training workshops on integrated pest management, marketing of vegetable crops, district level coordination of tree planting activities and natural resources management. We also provided some high value seed such as asparagus, and collected and grew the endangered forest bitter gourd, *ban karela* for conservation.

While our tree-planting provides the most cost-effective and far-reaching benefits to the atmosphere, nothing improves the quality of life more immediately than improving the **household infrastructure** for more sustainable human ecology:

We are experimenting with the most effective ways to fund such beneficial activities as constructing latrines, methane producing biogas plants and stoves, improved fuel efficient wood burning stoves, horticulture, etc. In predominantly Maoist Dang, **direct grants** function better than credit. In Chitwan, **microcredit** trusts function well with their circulating funds through the communities. This year we will be documenting with interest: the **voluntary activities** undertaken by the participants in our rural environmental education classes.



The 110 improved traditional stoves built this year will save about 30% fuel wood consumption and fuel collection time. As well as the health benefit of a smoke-free kitchen, women report more time for preparing vegetables and study. For homes with livestock, the methane producing biogas digesters we support give even more energy-conserving, clean and convenient cooking fuel and fertilizer.

2007 Direct grants for Human Ecology in Dang:

- 2 wells constructed in Dang providing water to hundreds of households.
- 110 improved fuel-efficient smokeless stoves installed and monitored
- 8 (6M³) biogas plants

SeedTree Community Environmental Trust projects in Chitwan 2007

- 7 wells or pumps
- 12 latrines were built
- 19 Vegetable farms established
- 9 livestock rearing with tree planting to offset environmental impact.
- 1 bee-keeping projects
- 4 (8M³) biogas plant

Activities undertaken by Rural Environmental Ed Class Participants

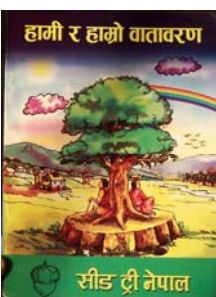
- 78 latrines have been constructed. (These may be brick and concrete structures or as simple as a pit at a set location.)
- 7 Environmental Awareness campaigns
- 7 began using green manure (high nitrogen leaves for fertilizer)
- 20 Sanitation awareness advocacy (neighbors encouraging neighbors)



- 37 kitchen gardens established
- 12 Improved cooking stoves
- 40 composting piles or pits
- 17 Tree planting
- 72 Home Hygiene
- 22 Eco-friendly income generation such as sericulture, apiculture, etc.

A Nawalparasi Class, 1 of 30 held this year in 5 districts of Nepal.

(Note: classes are still in session)



Continued from p. 1... of "Ourselves and Our Environment" is now advanced enough, to be useful at even the intermediate college level. While we still aim to keep the language simple, the atmospheric concepts are more challenging. We now ask that illiterate students be paired with literate to assist and that teachers have a School Leaving Certificate, (comparable to a high school education). We thank Debley Foundation for enabling us to support 17 more these classes which run nightly for six months, and give the teachers a well deserved 50% raise. In all, 30 of these classes teaching environmental systems science (soil, air and atmosphere, water, forest, waste, etc.) and our harmonious integration with them through human ecology are transforming village culture toward greater health and sustainability, primarily through women in their homes.

SeedTree offers deep appreciation for their inestimable and invaluable help over the years, to two of our Founding Officers, Tom Hammett and Richard Komp, who, while concentrating on other projects, will remain with SeedTree as Senior Advisors. Taking up their offices as President and Treasurer, respectively, are Daniel Cartledge, Ph.D. and LeAnn McLain, CPA. Thanks to other Directors old and new: Peter Arnold, Cloe Chunn, Secretary; Rob Lilieholm and John Perlin, our volunteer webmaster, Information Officer Emily Duffy, Midcoast Internet Solutions for donated services, and special thanks to all of you who make all this possible.