SeedTree

Projects in Progress

Issue 19 Annual Report 2014

From Landsat to elephant-back, 2014 offered

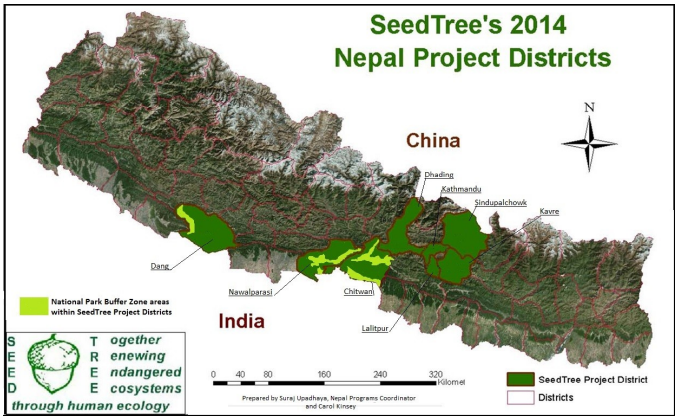
New Views of Success in Chitwan.

Literally, heart *(chit)* of the forest (*van*), Chitwan has ever been at the heart of our Nepal program. When SeedTree began in 1995, Chitwan National Park was under siege from human encroachment, illegal logging and conversion of forest to agriculture, threatening this refuge of endangered biodiversity. Nearby communities were suffering from deforestation and restrictions on traditional use of the forest. Nepal's policy for Community Forestry, successfully practiced in the hills, lagged in the lowland south as the government was reluctant to "hand over" its valuable *sal* or *Shorea robusta* forests. In 1996 SeedTree initiated workshops in collaboration with Forest Offices in Banke, Dang and Chitwan, introducing Community Forestry, tree seed collection and planting. SeedTree Board members Prof. **Rob Lilieholm** (U. Maine) and M.Sc. researcher **Jared Stapp**, became interested in Nepal's unique policy for community forestry. Jared chose to do field research with SeedTree around Chitwan. In May-June, this confluence of interest brought to Nepal: Rob to present his GIS work modeling alternative futures to the Forestry Colleges, Jared for field survey of attitudes to complement his Landsat study of changes in forest cover 1989-2013, our **Nepal Programs Coordinator Suraj Upadhaya** (U. KY) and me (Carol Kinsey) for an-

Chitwan, cont., p3 middle 1st col.

Croc at shore above, Rhino view below, hosted by Nepal Parks

Dr. Rob Lilieholm demonstrates alternative futures modeling using GIS at Nepal's Institute of Foresty



New Challenges in Dang:

With its difficult access, oppressive poverty that led it to be a stronghold of the 15-year insurgency, deforested, porous and eroded soils bringing both flood and drought, Dang presents challenges, need and a compelling potential. In 1995, the possibility that our two focus areas of Dang and Chitwan could help link the forest fragments of Bardiya and Chitwan seemed remote. Yet we embarked linking adjoining Banke also. When in 2001 WWF/Nepal embarked on the Terai Arc Landscape TAL project, aiming to link all in a vast, trans-boundary wildlife corridor, it suddenly seemed viable, especially given the recent establishment of a new Banke National Park. Much of the area served by our new partnership with Sayni Chaudhary's "Sister Home" lies within the Buffer Zone of the new Park. Sayni led five villages to successfully complete 5-month Eco-Ed courses, nurseries and tree planting projects by August. Then the severe flooding that struck all South Asia hit hard in Dang, taking 17 of our participants' homes. With Beeju Paudyal's prompt coordination, we were able to get some much needed aid

AP photo: flood damage in one of our Dang villages: Bakaraya

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Sayni distributes seed to flood victims in our groups.

for recovery, distributing 500 kg seed potatoes, also seed for greens, radish, onions, and beans to 75 of the most damaged households to replant their inundated fields. In the coming season we are preparing to replace flood losses and expand the tree planting program there.

We had already offered vegetable seed to those who would contain their livestock damaging to crops and forest regeneration. The generous and flexible support of **Kate Kinley Gregg, Debley,** and **Anderson Rogers Foundation** allowed us to respond with agility to meet these unanticipated conditions, as well as expand our Education and Human Ecology programs. Not only could we replace hearth's of the damaged homes with improved cooking

Hearth in one of 17 homes of participants, destroyed by August flooding.

Janaki (in green) completes a smoke-free stove, as Sayni and Sayni (foreground), a chimney

stoves (ICS), but we were able to make the whole village of Phulbari "kitchen smoke-free," providing ICS to 165 Dang households and another 85 in the hill districts of Sindhupalchowk and Dhading through NAFSCOL's Ram Gautam.

Janaki Chaudhary, who took part in our 1996 tree planting program, shared with this year's Dang groups the benefits that had accrued to her: a shelter belt protects her fields giving constant fuel and fodder, selective harvests of valuable timber including just 3 of her 18-year-old trees (above in 2009) this year which gave her half the funds for a nice parcel of land on which she is again planting more. Still many of the old trees remain, as the two at right, above.

One of 85 home biogas systems supported in Sindhupalchowk and Dhading through SeedTree/NAFSCOL's Ram Gautam. Woman leans against outhouse that feeds the system along with the outer well tile for feeding with livestock dung.

Our **Biogas Program** gives added incentive to contain livestock for easy access to dung, clean burning cooking fuel and fertilizer. Dang's soil is dry enough to proceed with 20 more biogas plants, in addition to the 85 new biogas systems already completed by Ram Gautam in our hill districts of Dhading and Sindhupalchowk, extending a government subsidy to reach the most needy. (see page 4 for methane / climate change discussion with EPA Administrator Gina McCarthy and EDF.)

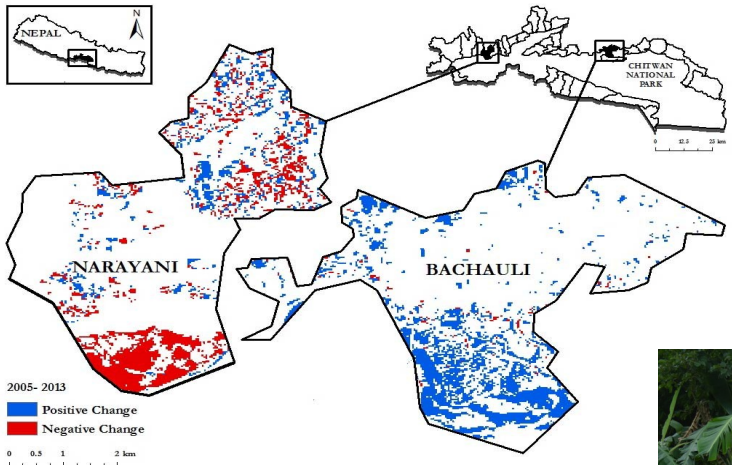
Fodder is an easily underappreciated benefit of our tree-planting. Tree leaves are the major source of livestock fodder in Nepal villages and sustain countless of our households' goats, cattle and bison.

Aqif Shahzad, our **EDEN ally in Pakistan,** continued educational programs, recycled 6000 plastic bottles, and distributed 3000 trees: neem, sissoo, and fruit trees like black plum, guava, mango and orange for planting by 10 groups. His mother, who his inspired his service for nature, led one of the groups in their rural area. Then **floods brought tragedy.** His family, along with thousands of others, lost their home. Aqif brought 9 family members from the countryside —where they had been stranded for 3 weeks without food and only flood water— to his small Lahore room, but still without time or resources to save the youngest two of his brother's children. They are still struggling to recover and with little support. Aqif showed these hopeful pictures of restoration from Dang, but EDEN, still recovering, has just begun to give presentations again. Aqif spoke from his own "grief and pain" about how we are the cause of this devastating climate change. He conveys his and EDEN's thanks for our efforts to seriously address this issue.

Peru: As these floods concur, it is those most vulnerable and least responsible who bear the worst impacts of our fossil fuel consumption. Among these are the recently contacted Nahua and the voluntarily isolated tribes of remote Amazonia, under extractive siege for oil, timber and land. SeedTree's allied Peruvian NGO, Ni Bero (Seed of the Forest), is managing our Eco-Reserve, at the frontier of this relatively untouched wild jungle, encouraging more ecological alternatives for economic development for the Nahua people. Already, in the adjoining logging concession, Juan Lau is planting trees and shifting to more sustainably earn by making furniture rather than by logging. With Eco-tourist volunteers, Adam Stone planted 500 trees and in 2015 Adam intends to help replant the deforested Nahua village.

...(Chitwan, cont. from p.1)

nual supervision and impact assessment. Jared's study of changes in forest cover around Chitwan is of interest to SeedTree. It revealed a significant correlation between our tree planting and the turning from deforestation to increasing forest cover. We visited two of the more extreme examples. Narayani VDC (area containing several villages), across the great Narayani River lay outside SeedTree's previously targeted working area, though in the Park's Buffer Zone. **Between 2005 and 2013 Narayani VDC lost 27% of its forest cover.** After our difficult jeep journey in 108°F heat, villagers gathered for Jared's survey of attitudes toward community forestry, renewable energy, etc. Seed Tree Nepal's Baburam VK helped translate and introduced the SeedTree Nursery and Tree Planting program, and both villages we visited expressed interest to join in 2015. WWF/TAL is giving a pump that will aid the new nurseries.



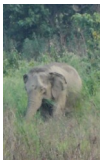
Changes in forest cover: two from among the worst and best of Chitwan Buffer Zone VDCs: 2005-13 (J. Stapp, 2014)

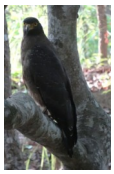
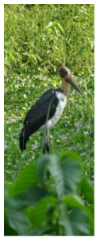
Jared waits as Narayani villagers assemble.

We hope they can turn the tide of deforestation, as has **Bachauli VDC**, which **from 2005-2013 gained 162.9% forest cover**. One of the Bachauli villages we surveyed was Jankauli. In 1995, it was the 1st in which we tested the participatory exploration of the uses of native tree species that has become the foundation of subsequent SeedTree Nursery and Tree planting projects. This galvanizing, self-selecting (PRA) method proved so effective, it led to 5 more that year, producing an estimated 45,000 seedlings and the founding of SeedTree. **SeedTree initiated 14 more village nurseries in Bachauli VDC, producing over 258,000 trees**, a major contribution to the turnaround from precipitous loss to the 162.9% increase in forest cover shown, **despite simultaneous increase in the VDC's human population**. We only know of only one other: a UNDP supported Bachauli nursery distributing 12,000 trees. Generous targeted tree-planting support from **Alternative Gifts International, Plant-It 2020** and **Credo Mobile** continued this transformative tree-planting in 2014: **500 trees in Peru, 3000 in Pakistan, and 230,878 in 8 Districts of Nepal.** The proven cost-effectiveness of our methods is prompting me to advocate for their use by WWF, whose TAL program has begun since 2001 to work in many of our Chitwan project sites. This year TAL Co-Manager Abdul Ansari took us through the Park to visit another long-served SeedTree Nursery and Tree Planting site in Madi: Baghauda.

Jankauli's 1995 Plant-It 2000 sponsored nursery site.

Jankauli group in 2014 with their new land and community center .



Invited through Chitwan National Park to visit WWF/TAL in Madi, we saw more than ever before of the iconic wildlife protected by our efforts, these as well as sloth bear and boar, who also protect the ecosystem. Bhagauda CFUG's welcome. 3rd from left Prabhu Mahato, 5th Indira, 6th Carol, far right is WWF's Abdul Ansari; Kneeling: Jared and WWF's Yubaraj Ghatane (formerly of SeedTree)

Another chance for advocacy arose during an EDF conference call with EPA Administrator Gina McCarthy and 71,000 activists in January. EDF's Fred Krupp told that methane is "84 times" more potent in the first 20 years than is CO^2. McCarthy spoke of the potential of its regulation, and I, thinking of renewable sources of energy, spoke of methane's utilization as fuel, referring to SeedTree's Biogas Program. The informative podcast may be heard online at: http://tinyurl.com/lvwmyde or through our Facebook page.

Statistical Significance, Fractal Replication, or Quantum Success?

While we cannot know all contributing causes to Bachauli's reforestation, Jared's objective confirmation of our work's significant impact is most encouraging. We hope it may lead other organizations to consider our cost-effective and socially integrated methods of forest restoration. Yet, I am as moved by each encountered participant's life improved, each patch of new forest, eroding ravine now filled green, household supplying its own forest products, living a more ecologically healthy, prosperous life. I can feel each "seed deed" as pivotal in the human ecosystem that may take root or disburse to somehow awaken a response in others, in ways beyond our knowing. Though "anecdotal," I find in these stories, the same faith brought to fruition, with which SeedTree itself was begun, inspired by the quote below, long posted on our office wall.

"...Concerning all acts of initiative (and creation), there is one elementary truth, the ignorance of which kills countless ideas ...: that the moment one definitely commits oneself, then Providence moves too.... A whole stream of events issues from the decision, raising in one's favor all manner of unforeseen incidents and meetings and material assistance, ... Whatever you can do, or dream you can do, begin it. Boldness has genius, power, and magic in it. Begin it now."

William Hutchinson Murray (from "*The Scottish Himalayan Expedition*")

Nepal's progressive policy for Community Forestry has curbed the rate of deforestation nationally since 1989 and has been a necessary condition for our success. It has not been sufficient. It takes the kind of activating, guiding interaction and modest, but well targeted support that supporters like you have enabled SeedTree to provide. On behalf of all the human and biological communities we serve, I convey you wholehearted thanks.

Carol Kinsey, Executive Director

SeedTree 2014 Program Outcomes Summary:

	1995-2014	2014
Trees planted	4,640,974	234,378
Wells or pumps:	99	2
5-month Eco-Ed Courses	199	21 with 549 participants
Improved cooking stoves constructed / (restored)	1,498	250 /69
Biogas -stove -latrines new constructed / (restored)	474	105 /13
Vegetable and potato seed support / kitchen gardening	1387	75
Scholarships	90	1
# of 549 Eco-Ed students who without further SeedTree funds, who also engaged in:		
Composting, organic fertilization		444
Recycling		316
Vegetable production/ kitchen garden		498
Latrine / toilet constructed or repaired		116
Improved stove constructed		147
Sanitation, improved waste mgmt.		494