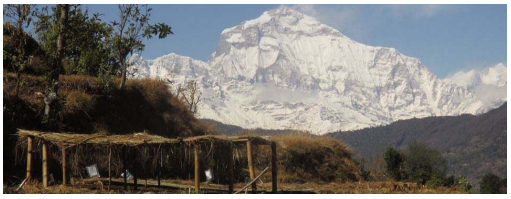
Together Renewing Endangered Ecosystems through Human Ecology

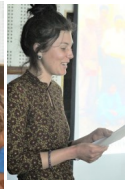
SeedTree

Issue 25: Projects in Progress Annual Report 2019



In the narrow width of Nepal, the highest icy Himalayan peaks may drop over five vertical miles to lowlands harboring threatened pockets of rich biodiversity such as above. The lands in between pose equally extreme challenges to the farmers who must make their living from them. Peace Corps Nepal Volunteers (PCVs) find SeedTree's Nursery & Tree Planting and Eco-Ed programs support their food security aims. The PCVs' 2 year presence and partnership with a Local Leader assures supervision at the most critical time, extending our reach to these underserved and otherwise inaccessible communities.

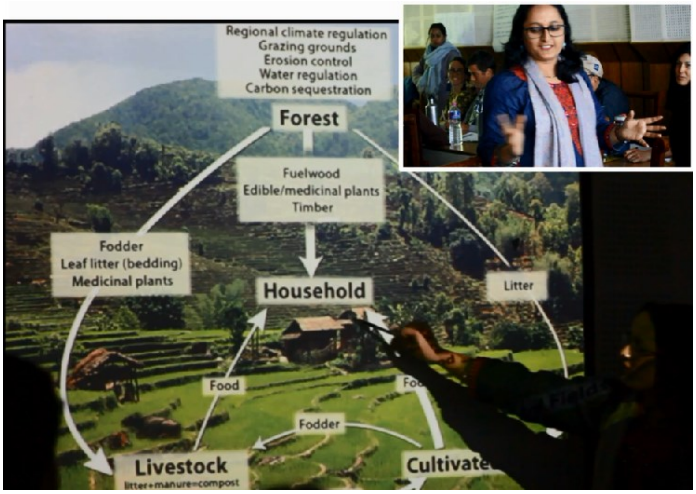
Welcome, Peace Corps Volunteers and Local Leader/Facilitators
to
Regenerative Eco-Agroforestry:
Integrating Environmental Systems for Food Security



Kate W.

From February 22-24, 2019 we welcomed 16 Nepal Peace Corps Volunteers from 6 districts of Nepal and their 15 Local Leader (LL) counterparts to our second orientation workshop. Accepting my request, PVC Kate Wilcox helped Beeju to acquaint all with the SeedTree program giving both history and realistic expectations of what we will offer: desired tree and vegetable seed, fruit tree saplings, text books for the Eco-Ed classes, and a small stipend for the LLs to record the nursery and tree planting data and facilitate the Eco-Ed classes and what we expect in return: commitments from the PCV/LL teams to work together for the success of the program and report on the results. Our second aim is to orient the LLs with the projects they will lead in their communities. They must be confident they understand the text used in the classes, "Ourselves and Our Environment" and can give examples of human ecology: how the lessons can be applied in their homes and communities.

LL Laxmi Regmi, with our text



Professor Deepa Poudel with one of her slides showing forest-dependent ecological relationships.

Scenic Pokhara was an accessible venue for the 6 districts' attendees. Its proximity to the Institute of Forestry IOF, fully supportive of our program, was a great asset. Programs Manager Beeju Poudyal did a fine job organizing the workshop and as a recent graduate was able to enlist the helpful support from students Sadhana Ranabhat and current Kate Kinley Gregg Work-Study Scholar Thakuri Shilpa Hamal, as well as IOF Ast. Prof. Deepa Poudel who spoke of opportunities offered by different examples of Agroforestry systems, sharing examples from her PhD field study. She showed interesting videos also which Beeju made available to all the PCVs.

Joining us again from Kathmandu Forestry College was Professor Murari Raj Joshi who gave a presenta-

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tion on different beneficial applications of Agro-Forestry. IOF also hosted our technical tree nursery-making and record-keeping training on campus grounds.

Professor Joshi shows slides on Agroforestry.

Chitwan and Sindhupalchowk Branch Managers, Baburam V.K. and Ram Prasad Gautam, respectively, shared their experience. They led the practical nursery making. The IOF Campus Chief, three faculty and some students joined. Beeju briefed them on record-keeping right in the field. A few of the IOF students became interested in how our record-keeping forms guide and record each step from receiving the seed to the planting of the trees in their permanent sites.

The SeedTree/PCV/LL Class of 2019 with participating staff and faculty celebrate the workshop's completion.

The teams returned to their villages better prepared to initiate the Nursery and Tree planting activities and the Eco-Ed classes. An unexpected activity for the Eco-Ed classes came from an "ice-breaker" exercise Beeju used in the workshops. Each participant takes a single component role in the ecosystem. Beeju explained how she made them into a chain linking soil to tree, tree to birds, birds to water, to fish as food for humans, etc. "I removed the tree and ultimately everyone disappeared."

LLs Danmaya Rana, Hasta Panta, and Parbati BK greet their assigned roles as water, soil and fish, with amusement.

Back in Myagdi, PCV Chelsea, serving with her husband Evan Allred, introduces the game with the class co-facilitated by LL Devi Rokka Chhetri, dramatizing with strings how all parts of their environment are interdependently tied together.

Institutional Development for SeedTree

The **Board of Directors meeting October 19, 2019** was arranged by then Program Leader of Cooperative Forest Research Unit Dr. Brian Roth at U. Maine for its conferencing technology. This year those who called in, could only speak to each other. President Peter Arnold's interest in expanding the SeedTree's village level model to seriously address climate change galvanized 2018 ST/PCV Teagen Baresi to explore from his position as a Peace Corps Recruiter. Peter's interest prompted me to meet with the Nepal Peace Corps Director and Manager in Kathmandu 1/3/2020 to draw up a more formal memorandum of understanding. Former Work-Study Coord., now Suraj Upadhaya, PhD from U Georgia still volunteers with communications from his research post at Iowa State.

Peter Suraj Teagen

Brian snapped the rest of the UM contingent sharing Nepali food after the meeting: grad students Rajeev Batterai and Suman Acharya, UM Forest Products Researcher Dr. Indira Silwal K.C., Carol Kinsey and technical expert George Ritz.

I showed the video I prepared for our place in the Alternative Gifts International Catalog https://tinyurl.com/ST2019Video featuring our mountain and middle hill groups. George offered a lot of knowledgeable comments, questions and suggestions, particularly at the technical ground level

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from his extensive tree planting experience. Later, AGI also filmed a live interview with me they published on their Facebook page.

Dr. Roth presented a program utilizing an app written by Ezra Jay for recording the growth of each planted tree using block chain and smart-phones with cameras and GPS. We later conferred with Ezra about this innovative attempt to develop access to payment for the environmental services trees provide, as they multiply exponentially as the tree grows. We are interested in applying this app experimentally where feasible.

Maine's new Gov. Janet Mills with SeedTree's new Assistant Director Brian Roth.

Brian, missing from the board photo he took, is included here at one of his last official acts in his role at UM on the eve of his departure for Nepal to become SeedTree's new Assistant Director. Brian is forging many new institutional relationships. We are drafting a MoU with the IOF and the new Agroforesry University AFU campuses in Hetauda and Chitwan, coordinating through IOF faculty Bishnu Hari Wagle, who will be coming to Maine for PhD study at UM, while Brian stays in Nepal through Spring. Brian has recruited Nepali students and Indira in whose home Bishnu will reside at UM. One student, Sandesh Shrestha has volunteered for data analysis. Brian's selfie here is with Bishnu and our Kate Kinley Gregg Work-Study Scholar Thakuri Shilpa Hamal. Shilpa is the second KKG Scholar, Beeju, the first. She is on schedule to graduate in May. Kate has been a life changing support for Shilpa and Beeju, well as a financial and advisory foundation for all SeedTree programs, particularly as they address her priorities: Women, Environment, and Education. While she must limit future support, she intends to sponsor one more young woman's Bachelors education. We will select based on academic excellence, need and interest to make a career in a SeedTree mission-related field, criteria also for the 2019 SeedTree/Rob Lilieholm Research Scholarship, awarded to a graduating Kathmandu Forestry College student. Nisham Thapa's selection was also for her well proposed research: "Impact of Mikania Invasion on Diversity of Native Plants and Rhino Habitat in Kuchkuche Bufferzone Community Forest, Chitwan."

Brian, Shilpa Hamal and Bishnu Hari Wagle at Institute of Forestry

Nisham Thapa

Ryan Cooper, a 2018 participating PVC, stopped by the Home Office in Maine. I asked for a story from his service and he told of a painfully shy woman's transformation during the course of the classes into radiant confidence. I asked Beeju about her and learned that she, Numkala, is now a Local Leader, working with Raven in the Arghakanchi village above.

PCV Raven Dunsten and LL Numkala Magar's group nursery/veg. garden.

Due to the extensive 2019 Peace Corps partnership at 15 sites, we kept our additional branch programs at 5 groups in mountainous Sindhupalchowk and 7 around the Chitwan National Park in Chitwan and Nawalparasi Districts. They received our Tree Planting and Eco-Ed programs.

The great 2015 earthquakes in Sindhupalchowk prompted our response of adding vegetable seed to our stricken groups. This became the model for our food security Peace Corps Volunteers. Some of the steepest slopes we serve are there in Sindhupalchowk. With the warming climate, they face deluge and drought. Stabilizing, enriching the soil with trees, often on terrace edges, sustains food security in the hills. In far Southeastern

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Jhapa District we continue supporting Jukekhade Community Forest.

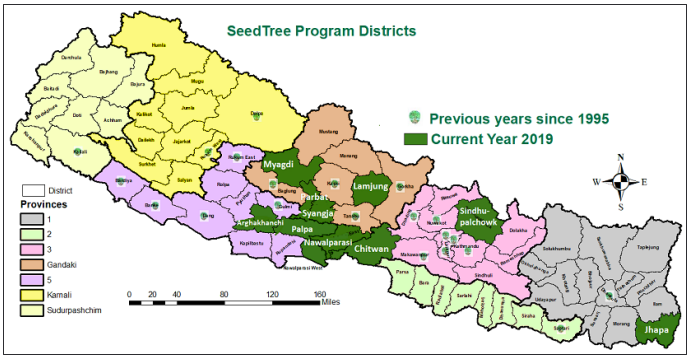
Beeju is presently arranging construction of 78 biogas plants and 85 improved cooking stoves.

Fruit saplings, just delivered and citrus one year after planting.

For the far south of our programs' reach, we must go to Amazonian Peru and Adam Stone's ongoing eco-tourism activities managing our Reserve with our local organization, NiBero. The remote reserve is adjacent to a logging area. Adam says, "they were logging and we were planting." Adam talked with the loggers about sustainable forestry and they helped plant the trees. 2019's focus was constructing a well for the nursery. Now the seedlings are ready to be carried with the eco-tourists upstream to plant on the land. The river banks of the reserve are mineral sources popular with the toucans that peck at their mud,

Changes for 2020: We have always welcomed all PCVs having the interest to participate able to find and a qualified local partner. For 2020, Peace Corps is asking them to apply and selecting only 8 new PCVs from the applicants. These 8 will take SeedTree Program into 4 districts new to us, including Pyuthan, Surkhet, Jajarkot and the far western Dadeldhura. Since Peace Corps is limiting 2020 participation, we look forward to renewing the biodiversity conservation emphasis that has always been our core DNA.

Baburam VK, who has been with us since 1996, spoke recently on local TV of that history with SeedTree and forming STN in 2001 for a certification project in Parbat. Baburam did a good job of delivering the important message of community-based conservation on Nepali TV. More outreach came as Peace Corps published online two of Kate Wilcox's stories about her work with Sarita in Lamjung, one featured for International Women's Day and another https://tinyurl.com/y27ex8rf about "planting the hills green with hope: combating climate change and caste discrimination in Nepal…."



With thanks to all you partners, Carol

SeedTree 2019 Program Outcomes Summary:

	2019	1995-2018
Trees planted by 25 groups	140,238	5,451,372
Scholarships	2	102
5-month Eco-Ed Groups	25	290
Improved Cooking Stoves ICS	85 in Jhapa	2,382
Biogas plants: (stove & Latrine, new construction)	78 in Jhapa	918
6 species vegetable seed given for 450 households gardens.	450	
fruit tree saplings 3 species to ea. household for horticulture	2250	

 # Eco-Ed students w/out further funds also engaged in:

Green Manuring (organic fertilizing)	357
Home Horticulture (additional STN participants)	75
Waste Management: Recycling, composting ,	722
Maintaining home biogas/sanitation systems	116 (STN)