Nicaragua Work Study With CO2bambu

In summer 2011 I went to Nicaragua with five other students to spend time with the social entrepreneurship CO2bambu, which makes low cost housing using bamboo, wood, cement, sand, and metal. The project was facilitated and funded by the student club Nourish International, which in my opinion is the most relevant club for IARD majors. We had arranged that during our time we would build a composting toilet and 18 eco efficient wood burning stoves. We arrived in Managua and were picked up by a van arranged by CO2bambu, which drove us to a very nice hostel in Granada at a rate of $10 per night. We spent a couple nights in Granada being briefed by CO2bambu (their office is in Granada) and seeing the city. Then we went on a 12 hour car ride arranged CO2bambu to La Rosita which is a small remote town in northern Nicaragua where the CO2bambu facility is located.

Food and Housing
We stayed in a community owned and run “hostel”. The building was built by the mayor and had about ten average sized rooms, all on the second story, and an open air patio area where we could cook and hang out. It had two bathrooms with bucket flushing and bucket showers, but they were cleaned and well-maintained, along with our rooms if we did not lock them. The hostel was bare bones but comfortable and especially nice because the six of us were the only ones occupying it, so there was plenty of privacy. After the hostel’s propane burner was stolen we arranged with a family across the street to cook dinner for us, with our group providing food to be cooked and some money. The rooms at the hostel were very cheap, under $2 per night. The only staff were occasional cleaners. The Hostel was about a ten minute walk from town, the CO2bambu facility and the nearest restaurant. There were plenty of restaurants in Rosita but the food was pretty repetitive with beans, rice, plantain, meat and some vegetables. A meal costs a couple dollars.

What we did
During our 6 week stay, we helped to assemble CO2bambu houses from start to finish, and though we were not very helpful due to our lack of experience, we did learn the full process of how the houses were built from raw material to the finished house. They were pre- fabricated at the CO2bambu facility and trucked to their end site location where they were assembled and finished. Each house costs about US $4000-5000, and were sturdy and well finished. We also built a composting toilet, with the help of the workers, which used the same building techniques as the houses. We also built 18 L chamber efficient wood burning stoves (materials bought from the NGO Prolena) in an indigenous community that CO2bambu had built houses for (with NGO contracts). This was a very important learning experience because the community leader was aggressive and difficult to work with but everything ended up being OK. We also went to multiple natural bamboo stands where CO2bambu was harvesting, which was fantastic because it was in the jungle. We saw and helped process the bamboo, from harvesting to cleaning to
cutting to splitting it into mats and finally treating it in a chemical bath. We learned about bamboo cultivation from collecting seed to planting seedlings for reforestation. At the end of the trip we went far south with the CO2bambu team to plant bamboo seedlings that were ready for planting. We also toured the largest gold mine in Nicaragua, operated by a Canadian company. Most of the foreigners we encountered during our stay were in the resource extraction industry. La Rosita was being heavily logged.

Conclusion
Overall our experience was (incredibly worthwhile, very educational and eye-opening. We learned about how the housing business operated, how to better interact with communities, and how to process bamboo from seed to house. We had a lot of say over the structure of our trip and CO2bambu acted primarily to facilitate what we wanted to do. They even provided us with a driver. People who go on this trip should be self motivated and self-directed because CO2bambu will not want to make a day by day schedule for you. I recommend going with a group or at least a friend. One of the group members returned to Nicaragua a few months later to work for CO2bambu.

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www.co2bambu.com

Organizations in Haiti

Developing Bamboo in Haiti
I went directly to Haiti with a friend, representing an organization we helped to start called Developing Bamboo. We brought with us about 10000 bamboo seeds from Nicaragua, which unfortunately never germinated. Through our work in Haiti we have made connections with numerous organizations, some of which are described below.

Contact: Developingbamboo@gmail.com Chris: 607 351 8698
www.developingbamboo.com

Little Footprints Big Steps: is dedicated to providing a safe house for Haitian children in desperate need of shelter, food, education and love. Every child rescued from a situation of abuse, slavery or homelessness will be given medical and psychosocial care, as well as support in finding a permanent residence if a reunion with family is not possible. This is a fairly new organization started by a friend I met in Haiti. Her name is Morgan Weinberg, she is a 19 year old Canadian girl who spent 5 months living in a corrupt and abusive orphanage. During this time she formed a very strong bond to the 75 children at the orphanage and vowed to rescue these children by starting a children’s safe house.

Contact: Morgan Weinberg: 31561 563 morgan.2.2@hotmail.com
http://www.littlefootprintsbigsteps.com/

Foundation Seguin: is a Haitian environmental organization dedicated to saving the forest in La Visite National Park, one of two forests left in Haiti consisting of just three dwindling patchy square miles of pine and less than one square mile of highly bio diverse
cloud forest. Winne is the man who is at the heart of the organization. He lives at the edge of the forest and his home is right next to the Foundation Seguin headquarters. Accommodation is quite nice but expensive. However, you could arrange a discount if you stay for a long period of time and are useful. The organization does all sorts of things from collecting native endangered species to planting fruit trees. There is immense need and potential for agricultural extension in Seguin.

Contact: Winne +509 38510159 winthropattie@hotmail.com
http://www.fondationseguin.org/

Wynne Farm Ecological Reserve: Jane Wynne is an extremely nice Haitian woman whose backyard is a lush bio diverse bamboo forest and who also has a sustainable farm. She is extremely environmentally and community minded, and organizes a summer camp for the children in her town every year. Her home is very welcoming and always bustling with interesting visitors who are welcome to stay the night or have a meal. She loves composting and encourages all sorts of environmental entrepreneurial endeavors at her home. She is located in Kenscoff, a fairly well off mountain town about 45 minutes outside of Port Au Prince.

Contact: Janie: 509-37733058 jwynne2005@yahoo.fr
http://wynnefarm.org/

Grassroots United: This is a logistics organization that covers a wide scope of activities. For us it served as a place to sleep, eat, network and operate out of while in Port au Prince. Tent space is $15-25 per day with meals included. It has many resources, from tools and building materials to all sorts of interesting people doing all kinds of work. Much of the work they do focuses on facilitating NGO logistics and networking, as well as medical and educational community outreach. They will pick you up from the airport and are a fantastic, safe place to stay while in Port au Prince.

Contact: Grassroots united: 375-317-71 or 375-118-95
http://grassrootsunited.org/

Organization for Restoration of the Environment: This is an older Haitian organization with a lot of experience in fruit trees, community agricultural extension and organizing systems to help farmers consolidate and market their crops. They are located in Les Cayes, at the tip of the peninsula and also have a large compound with a diverse genetic stock of bamboo species.

Contact: Dr. Mousson: 37587565 mail@oreworld.org
http://www.oreworld.org/

Kleiverks International: This is an organization that focuses on building with natural materials and training builders in local communities in natural building techniques. The executive Director is Kevin Rowell who we have close ties to and who is also a bamboo enthusiast.

Contacts: Kevin Rowell: US: 510-325-4277 Haiti: 509-375-9819-4 Kevin@kleiverks.org
http://www.kleiverks.org/
Association of the Peasants of Fondwa:
Probably my favorite organization in Haiti, it is a local organization which essentially acts as the community government for the region that it operates in. All of its buildings were destroyed in the earthquake, but they still manage to operate a primary and secondary school, university, medical clinic, community center, restaurant, tree nursery, microcredit bank and many other services. They are well organized, environmentally minded, and have a network for organizing farmers. One perk is that since they have a university, there are students to hang out with. During my most recent visit, they found two other students for me to stay with and they fed me at their restaurant. The other advantage of their university is that it provides the possibility of a university partnership and a more academic experience.
Contact: edrix Alcimé edrixia@yahoo.fr
Herault Fondwa(agronomist): 374-814-98

CODEVA: is a local community organization with a long history in La Vallee De Jacmel, where our bamboo project is based. The president is a very relaxed and helpful man named Theodore Payen, who has spent much of his working life in the USA. He is well respected in the community and can help get things done. CODEVA has some land in town, some of which we have turned into a bamboo nursery. This parcel of land also has some structures in need of renovation, a water source and a tangerine nursery.
Contact: Theodore: 364-158-67

CODEHA: is another organization in La Vallee De Jacmel. It has a building that can accommodate volunteers and a neighbor who can cook. It focuses on youth empowerment and education and last summer put on a volunteer program with Volunteers for Peace at many of the different primary schools around La Vallee. They are also host to one of our bamboo nurseries.
Contact: Francois Nau, francnau@bellsouth.net

Taiwan's ICDF: This organization is analogous to the USAID except that Taiwan’s ICDF focuses exclusively on bamboo and agricultural development. The ICDF has been consistently providing us with bamboo planting material, technical expertise and oversight for our nurseries. It has a large compound with a well funded bamboo facility and treatment center. It is a benign presence who can provide treated bamboo and technical expertise. They have recently built a few bamboo houses very similar in design to CO2bambu houses ranging from $4000-4500
Contact: Danny (bamboo) danny.b906038@gmail.com :389-484-13
Desir (Taiwan): 383-967-87 : desigues@yahoo.fr

Words in Action:
This is a health/community based organization started by a Haitian who received a scholarship to study in a Christian private school in Haiti. He is now attending a medical school in the USA; however in the meantime he has started an organization to help his home town, Carrefourberth, which is a small, very poor rural mountain town about 40 minutes outside of Port Au Prince. This organization is still in its beginning stages, and
currently has a basic medical clinic and does some school scholarships. It is looking to expand its clinic and programs.
Contact: Claude Louis (clinic in Carrefourberth): (509) 381-76-296

**Habitat for Humanity Haiti:** We have been talking with the director of Habitat for Humanity Haiti about developing the bamboo value chain and incorporating it into their houses. They sound enthusiastic about the idea. We spent a few days in Haiti with Doug Taylor of Habitat for Humanity talking about incorporating bamboo into their work in Hinche.
Contact: Claude Jeudy (National Director of Habitat for Humanity): 36447813 or +(509) 3701-3262, ext: 6234 HFH mobile: + (509) 3644-7813: cjeudy@habitat.org
[http://www.habitat.org/intl/lac/89.aspx](http://www.habitat.org/intl/lac/89.aspx)

**Clinton Foundation:** Developing Bamboo attended the Clinton Global Youth Summit in San Diego and later was contracted to build a bamboo exposition at the Clinton Martelly Building Back Better housing exposition in Port Au Prince.
Contact: Lucia 31392924

**Organizations in Phillipines and Thailand**

**Silid Arlan in the Phillipines:**
This is an educational organization which has expanded rapidly and with great success in recent years. Silid Arlan is run by a man named Arcie Mallari, who is very nice and extremely competent. The organization functions as an afterschool program for underperforming youth. It has seen great success in turning some of the worst performing students into some of the best performing students. It focuses on leadership and more recently video production. At first we slept at Arcie’s parents’ house and shortly after moved out down the street into a mostly open air apartment with two friends. Breakfast and dinner was prepared at Arcie’s parent’s house at low cost. Housing was also low cost. Silid Arlan is a good connection for working with huge public schools as well as trash dump sites.
Contact: [arciemallari@silidaralan.org](mailto:arciemallari@silidaralan.org)
[http://www.silidaralan.org](http://www.silidaralan.org)

**Population and Community Development Association in Thailand:**
PDA is a fantastic organization that focuses on rural development by empowering communities through microcredit and education. It is well organized, has great food, great accommodation, an incredible bamboo school and fantastic programs. Their main office is in Bangkok in a bustling tourist district.

In terms of IARD related learning, this place is an absolute GOLD MINE! I learned so much to do with rural development activity. If a student is interested in education or micro finance then all the better. While working with them, I was just soaking up the aura of rural development all around me. They have all these agricultural demonstrations at the school and in the villages too, eg. mushroom farming, out of season fruit-growing
like limes and cantaloupes, as well as livestock programs to raise pigs, chickens, frogs, crickets, fish, etc.. I've also learnt all about their many different programs - especially how they start community run/owned micro finance banks which has been the basis of their rural development program for the past 20 years. These PDA programs are located in very safe locations.

They expect a lot from their interns. Also they prefer longer internships like 8+ weeks. An intern would probably have to plan some cool project or list of outputs that they would do during their internship, I'm sure PDA could help with this though. For example one group came and set up a soft shell crab raising experiment, where they built 9 crab cages and put them at different depths to see how the crabs do. That's just the first stage though. One cool thing is that you can pretty much choose what you want to learn, and they have a many of different options. I didn't have Thai language training before coming and it worked out fine. PDA has a group of health students from Columbia University come every summer. If they charge something for food and accommodation it will be reasonable.

Definitely the most important things I learned at PDA are the ethics that Dr. Mechai (the founder) has incorporated into PDA's development programs and the bamboo school. PDA gets the villages to do their own needs assessments and make their own development plans, start their own banks, etc. PDA is basically just the facilitator and fundraiser, leading these communities with questions or examples rather than answers.

Contact: gavink.pda@gmail.com (intern coordinator)
http://www.pda.or.th/eng/