

**BUILDING UNDERSTANDING THROUGH INTERNATIONAL
LEARNING AND DEVELOPMENT (BUILD)**

**Guatemala: Project Santa Anita
Spring 2009 Project Descriptions**

Introduction

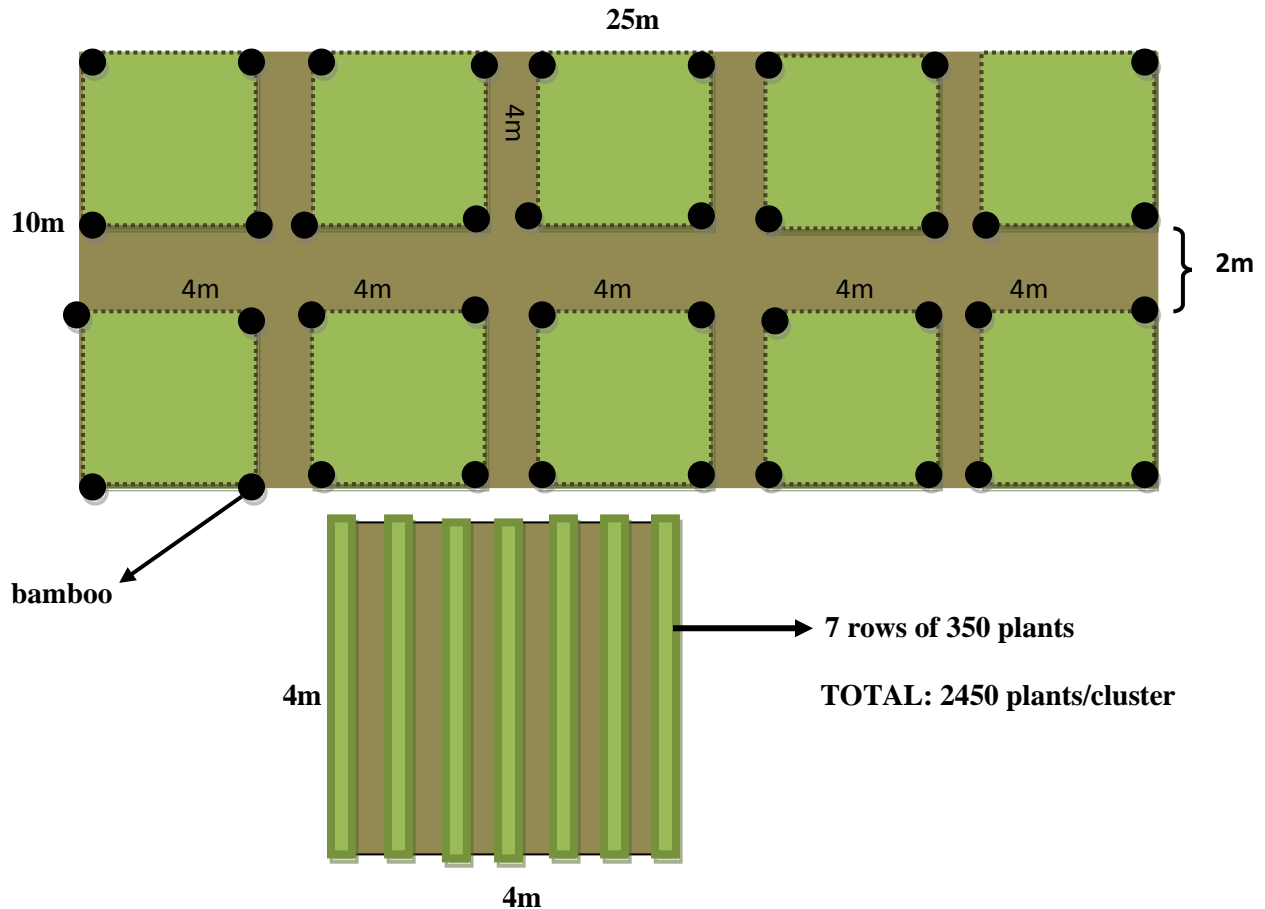
BUILD has been working with Santa Anita since May of 2008. The initial two-week research program in Santa Anita resulted in a then unfathomable partnership with those 36 families. Since that time in May of 2008, BUILD has returned to Santa Anita twice to collaborate with the *junta directiva*, members of the *asamblea general*, international coffee buyers, and Xela-based FUNDAP, to come up with a Community Development Plan addressing all three areas of sustainable development: social equality, environmental justice, and economic development. In total, BUILD is sponsoring 14 projects in Santa Anita, all of which will be completed over the next months. The most concentrated effort will be in May and June of 2009, but publication of materials, etc., will take until January of 2010. Final production increases will not be visible until 2013. It is BUILD's hope that our partnership with Santa Anita grow and flourish over the next years as Tufts students and the men and women of the cooperative work for community development.

24,000-Plant Seed Nursery

There are lots of names to describe this structure. Some in the junta and around the community have called it an "*almácigo*," a "*semillero*," or a "*vivero*." Essentially it is to be a rectangular structure held up by bamboo pillars. The shading will be made entirely of organic material (mainly banana leaves). Within the nursery there will be rows of plants in small black plastic bags. They will germinate, etc., in the *almácigo*, to be moved after 11 months to families' plots. Don Gavino will be in charge of the *almácigo*. He is to be trained in seed nursery management by FUNDAP in the coming months. The construction is set to being in May shortly before we arrive, and will be completed in June, with the help of BUILD and all families of Santa Anita. There are dual seed nursery projects going on here in Santa Anita this year. Catholic Relief Services is providing a technician in organic farming to work on a three-year long term program with all of the *socios*. This year they have begun planning for a nursery exactly like the one we are constructing. Ours is to have the capacity for 24,500 plants, and the CRS seed nursery is to house 32,000 plants. The two structures are to be built right next to each other behind the new *beneficio humedo*. Instead of building one, unified structure, the *junta directiva* decided to separate the *almácigos* to protect against infections. With separated *almácigos* any sort of infestation and/or infection will not destroy and entire year's new plants.

When BUILD was asked to present at the local assembly on March 16, we realized that there was one major point of contention surrounding this project. Santa Anita is an association of 32 families, yet only 27 of those 32 are exporting-certified. The other five families have willingly removed themselves from the exporting group and, instead, sell their coffee locally. They make much less money in the local market. Their reasons for leaving the group of 27 vary--some left because of infighting, others left because they did not want to comply with the labor-intensive standards of organic and fair trade certification, and other left because they wanted to get paid in monthly increments as opposed to once per year. So, the problem with the *almácigo* was this: do all 32 families get a spot for their plants, or just the 27 exporters? Mike and Sasha and Kathryn were asked many questions about this issue, and many members of the assembly were essentially asking BUILD to make the decision. So as to avoid causing problems or making enemies, BUILD said that they are not in the community to impose decisions, but rather to work for the community's self-propelled development, which can only be done when the community makes decisions for itself regarding production, etc. After several hours of meeting, with input from FUNDAP, the assembly decided that those who have been participating in the training programs are the ones who should get a space in the nursery. Members from the 27 exporting families have participated in the training programs, while none of the 5 non-exporters, although invited to take part, have not shown up for a single training session with FUNDAP. Taking into account the numerous factors and opinions, the decision to grant the 20,000 plants and the space in the *almácigo* to the 27 exporters seems the most appropriate choice.

The construction of the actual structure is to begin in May, but since the end of February, several community members have been clearing the land where we are to build. The space to be cleared measures 25m x 10m. Bamboo poles will be erected every 4m to hold up the roof. Each 4m x 4m square between the bamboo poles will house 7 rows of 350 plants, with space between each row for manual irrigation. A rough outline of the structure is provided on the following page.



In the months of April and May, FUNDAP will be training several women in the root grafting process, which will make the harvesting more sustainable and internally-derived. Also, Don Gavino is to be trained in seed nursery care, management, and irrigation in the coming weeks to prepare for his role as the head of the structure. Also in May, as the construction begins, seeds will be purchased, and fertilizer will be placed in the bags that will be used to house the baby plants as they grow, before they are brought into the *cafetal* in the summer of 2010.

The *almácigo* is to be constructed to the side of the *beneficio humedo*, where the fertilizer is made and harvested beans are washed and de-pulped. The following page illustrates where the land is being cleared.

(see next page)



New Plants

The plants from the nursery are to be planted in 2010. So as to not wait so long for results, BUILD has decided, along with the community, to purchase 20,000 new, partially grown plants from local nurseries. These 20,000 will be planted immediately, and will begin producing in two years. The community was faced with several varieties of plants to choose from: *caturra*, *catuahi*, *catimor*, or *bourbon*. All have numerous advantages and disadvantages. Initially, every socio placed different orders. At an assembly meeting, the community decided to switch to a unanimous, 100% purchase of *bourbon* plants. *Bourbon*, while at times more susceptible to fungal infestations, has a life cycle of up to 40 years, whereas the other three mentioned last no more than 10 years. FUNDAP has found a nursery that can provide 10,000 plants this May, and they are having trouble finding the other batch of 10,000. The junta, to resolve this problem, has started searching independently for the other half, and have located a nursery in Suchitepequez that may be able to provide the plants by May. They have been coordinating with the CRS staff and FUNDAP to coordinate the purchase and quality tests.

All of the 20,000 *bourbon* plants will be planted in May and June of this year. This round of planting, in tandem with the seed nursery project, will yield a total of 45,000 new plants in the ground by 2010. This increase in capacity will allow the farm to double production in under their hoped-for timeframe of 10 years. Mike, Jeff, Molly, Zoe, and Hillevi spent about two hours doing calculations with Don Rigoberto as to current rendering and land use capacity. Their calculations proved that, as of 2008, the average exporting family of Santa Anita is only producing to 22% of their land's productive capacity. So, in short, these plants are a first boost in a process that has a long way to go.

Agricultural Training

Part of the BUILD-FUNDAP plan is to conduct 40 weeks of agricultural training for the exporting families of Santa Anita so as to standardize production methods and equalize bean quality among the various exporters. The training, following the cultivation schedule, began in late January and will

continue through December, through the harvest of the beans and the follow-up procedures. Upon the end of the 40 week program, FUNDAP will leave the people of Santa Anita with a reference manual for continued reinforcement of the imparted ideas. Over spring break, Mike and Sasha and Kathryn spoke with Santos Lol, the engineer conducting this section of the training on fertilizer and shading patterns. He expressed some concern over community participation, and this issue was addressed at the town meeting by the BUILD leaders. We now have a log-in system before the trainings to monitor attendance, and we labeled training program attendance as a prerequisite for receiving part of the new round of plants. Hopefully this will assure consistent attendance, even though more than half the community has been present at most sessions up until this point. The schedule of the trainings has also been rearranged so as to accommodate those men who work outside of the farm occasionally for extra income.

Organizational Training

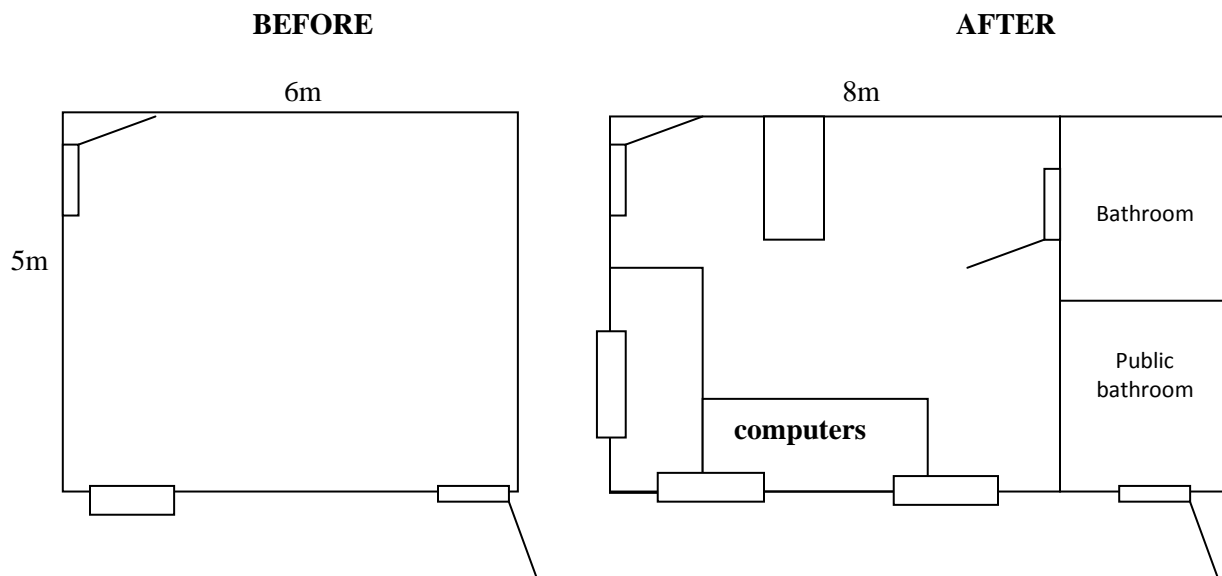
The organizational training will cover such topics as community relations, accountability, leadership, and community politics. This training is just beginning in the month of April and will last 20 non-consecutive weeks through the month of September. The engineer in charge of the project is Juan Morales. In person, Engineer Morales is very dynamic and outspoken, which at times can be interpreted as condescension; however, the community seems receptive to Mr. Morales' participation in community politics and discussions, as it is his job to conduct a thorough evaluation of business and community organization before he begins the training process. Mike spoke with Morales over spring break to discuss this issue of navigating community politics. As the project has continued, arguments have settled and the work of BUILD and FUNDAP has become more of a rallying point than a source of contention.

Santa Anita Computer Center

An unused building near the center of the community will be renovated and expanded to house the six donated computers that BUILD will bring to Santa Anita this summer. The computer center will be for general community use, volunteer use, and use by members of nearby farms. The center will also house a bathroom with access from the interior, as well as a public bathroom with street access. While BUILD is in Santa Anita in May and June, they will conduct 5 computer training classes in this building. Community members will pay a low cost--less than 25 cents--for daily use of computer facilities, and visitors to the community will pay a slightly higher cost--around 80 cents per hour--for computer use. The revenue earned from computer fees will be used to pay for internet after the first year. The center will be open from 2:00-6:00pm every day, and will be permanently staffed with a community member previously trained in computer use and basic computer repairs (see: "Computer Technician Scholarship Students"). The budget for the renovation was compiled in March 2009 while BUILD was at Santa Anita. Budget costs include, but are not limited to the following: sealant for the new roof, cement, cinderblock, laminate, electrical wiring, gutters for drainage, glass windows, metal doors, steel grating for windows, locks, tin for the roof, bathroom plumbing, sinks, toilets, and light bulbs. Members of Santa Anita have offered to construct the tables for the computers, as well as chairs. BUILD has offered to purchase the wood and other materials for the construction of these tables.

On the following page is a rough sketch of the expansion of the facility, as well as photos of the pre-renovation structure.

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Internet Installation

BUILD will finance the installation of internet before the computer training classes begin in May of 2009 and will pay the monthly internet fees for the first year after installation. The provider will be TIGO, a large national telephone company that offers satellite internet service via modem. There is excellent TIGO reception at Santa Anita, so the choice was clear. One modem will be placed in the computer center and a second will be used exclusively for the office of the *junta directiva*. The total cost, for both locations together, is \$960 per year (subject to change) and BUILD will finance the first year, while the revenues from computer center use will accrue so as to pay for the service for the following years.

Computer Training Classes

The BUILD team is designing computer training classes for four different groups in the community: the *junta directiva*, ecotourism program staff, community members, and youth. The course will consist of 8-10 2-hour sessions and will cover basic Microsoft office programs and internet use. The course for the *junta directiva* will be smaller and will offer more one-on-one tutoring as opposed to classroom instruction. Their course will be geared towards bookkeeping, email usage, and online forms, whereas the

course for the community members and youth will focus on all elements of Microsoft Office, general internet browsing, and uploading and saving photos, documents, etc. Lastly, the course for the ecotourism staff will be run differently from the others, in that it will focus very heavily on internet browsing, email, digital photo uploading and editing, and publication of tourism materials (e.g. pamphlets) for distribution in the Quetzaltenango region. The final project for the ecotourism course will be to produce a color pamphlet, ideally as a model for future replication.

Guide School

BUILD will help the women in charge of the ecotourism program at Santa Anita design a course for new trail guides. There are currently very few guides in the community who can take visitors on a hike to tour the community's land, and there is no prior training or prerequisites for these individuals. The guide school, an idea first mentioned by Doña Gloria who serves as head of the ecotourism project currently, will teach new guides about the flora and fauna at Santa Anita so they can relate this knowledge to the community's visitors and help standardize foreigners' experience of the ecotourism program.

Computer Technician Scholarship Students

BUILD will sponsor two of the community's youth to attend a fifteen day intensive, immersion computer course in Xela. These students will be trained in basic technical computer skills and basic computer repairs and will then serve as resident computer experts in the community and also as the rotating, permanent staff of the Computer Center which will be open for four hours each afternoon. These resident technicians will be in charge of developing, with the guidance of BUILD, a computer use policy as well as a computer use contract for anyone who enters the Computer Center. Additionally, these students will be in charge of collecting all usage fees and keeping a record of those who enter the facility.

Field Guides

Currently, Santa Anita's ecotourism program is functional, but unstandardized. In a discussion with the program's current director, it was expressed to BUILD that those who are supposed to show foreign groups around the property when they first arrive sometimes don't show up. When guides do show up, they often have trouble relaying information to volunteers because of the language barrier or just general lack of training as to what information is relevant for a 2-hr walking tour. To address this problem, BUILD has tasked several students with compiling information about the flora and fauna of Santa Anita with the goal of publishing field guides in Spanish and English for groups of foreign visitors to the community. In March 2009, Doña Gloria took this group around the entire property of Santa Anita to explain to them the different medicinal plants found onsite, the differentiating elements of the types of coffee, and organic materials used in fertilizer and organic pesticides. All of this material obtained at Santa Anita will form the base of the field guides, which will be supplemented with research done at Tufts and with Tufts Biology professors. Ecological research will be completed in May and June under the direction of Doña Gloria and the field guides (30-40 pages) will be completed and published in the fall of 2009. Additionally, the information on medicinal plants and traditional plant uses will form the core of the "Guide School" training class of June 2009.

Trail Maps

Currently Santa Anita only has one map for tourists, and it is hanging on the wall of the guesthouse. This was a problem BUILD first noticed last summer during its initial research trip to the community. Foreseeing this project, and after discussing it initially with the *junta* in January, several BUILD students spoke with Professor Florence of the GIS (Geographic Information Systems) department and Tufts and received a basic training in GPS mapmaking and GIS software. Several GPS units were loaned to BUILD

and basic trails and buildings of Santa Anita were mapped over the week in March. After speaking with community teachers and administrators about the map project, BUILD students were allowed to map the school buildings as well. At Santa Anita there is a collection of maps that were made when the 36 families first arrived; however, these maps are ten years old and do not depict the trails now used for ecotourism walks. While BUILD can use some of the information from these old maps, all of the trails and points of interest relevant for 2009 must be mapped. The GPS plotting will be finished over the summer, and the map will be made with the help of the GIS department in the late summer and fall of 2009. These maps will be scaled and replicated to be included in the aforementioned field guides.

Pamphlets

Currently, Santa Anita boasts little promotional material. As part of the ecotourism staff computer course, to be taught by BUILD students in June 2009, we will work to produce an advertisement pamphlet for Santa Anita's ecotourism program. This pamphlet can serve as a template for future publications, and will teach the ecotourism staff valuable skills in Microsoft Word and Publisher. Ideally we will be able to publish sufficient copies in the U.S. once the design is finalized so that the community can distribute them to local tourism agencies and language schools in Quetzaltenango.

Socioeconomic Diagnostic

In conjunction with Pura Vida Coffee, BUILD will conduct an extensive socioeconomic diagnostic of Santa Anita to establish a baseline against which we can judge the impact of our projects as they progress. This evaluation will include information about average family income, education, production, job migration, distribution of labor, health, and political participation as well as community organization and access to services. As production numbers increase and incomes rise, we hope to gauge changes in all of these areas to be able to determine future projects based on continuing need, etc. In March of 2009 BUILD conducted a basic survey of approximately 20 families of Santa Anita. The results were sent to Pura Vida, the company requesting the survey, and were also used for BUILD's presentation in the Undergraduate Research Symposium. The families of the *assemblea* willingly participated in the survey, and the widespread honesty and openness to reveal personal information is a good sign that the rest of the diagnostic will go smoothly.

Manuals

BUILD will produce a computer training manual that will be left in the community for reference after the computer course. The manual will contain pictures and diagrams labeling the appropriate terminology to different parts of the computer and its various programs. It will present step-by-step instructions for operating the computer and using its software, and will also have a section devoted to troubleshooting. This manual will help community members and computer lab staff sustain their computer lab without BUILD's presence.