DEDICATION
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Preface

The following community profile of Guadalupe, Costa Rica was composed by a group of fifteen students from the University of Vermont as part of the course Communities, Conservation, and Development. We arrived in Guadalupe as a class with two professors and teaching assistant on March 1, 2014 after an eight-hour bus ride from San Jose, Costa Rica. Once there we all resided at the Danta Corcovado Lodge for the period of the class study. On our 7-day excursion we put in a lot of class time learning about Participatory Rural Appraisal, Rapid Rural appraisal research methods as well as the ‘Community Capitals’. We put our hearts and a lot of hours into the collection of community information along with reading, writing assignments and class discussions.

During our studies we also had the chance to work alongside four community liaisons. The wonderful interactions we had with them and the community members of Guadalupe helped us to construct this document along with our passion, hard work and knowledge we gathered on the ground. Hosting a fiesta, conducting surveys and engaging in daily community activities helped us make those interactions. As a class we feel that the most important and memorable aspect of the entire trip while in Guadalupe was creating relationships with these individuals of the community. The positive attitudes of the residents and the acceptance they had for us truly added to the overall experience. We want our project to serve as a helpful tool for the community of Guadalupe to learn about themselves and to grow as a society. We also prospect that our document can be something for other UVM students and organizations to use for future projects.

We believe that our project encompasses our sincerity for the community, understanding and educational experiential data we collected. We, UVM students want readers to know that the data, stories and information within our text are not completely exact but rather an interpretation of what we observed. This was the first time any of us created a profile for a community in a service learning class. Therefore, we are in no way experts in this field of learning or community profiling. Our hope is that the profile, although not perfect, is not only informative but an interesting documentation of what we learned. Although, this should not be considered a definitive profile of the community, we hope it can serve as the foundation for one, and as a living document which can be improved, amended, and built upon over time. We ask readers to review the document with a kind eye and work to contribute to its improvement if they have the skills and knowledge to do so.
Introduction

In Spring 2014 a group of students from the University of Vermont took part in a unique and remarkable opportunity to immerse themselves in the culture of Guadalupe, a rural village located on the Osa Peninsula, in southern Costa Rica. Through a course entitled, Service Learning: Communities, Conservation, and Development in Costa Rica, lead by instructors David E. Kestenbaum, Walter F. Kuentzel, and teaching assistant Tom Wilson, students spent a week uncovering the stories that make up this beautiful community.

The lives and cultures of people across the globe are composed of many overlapping stories. Unfortunately, too often, people only concern themselves with a single story about another person or country, risking critical misunderstanding. In the words of novelist Chimamanda Ngozi Adichie,

"Stories matter. Many stories matter. Stories have been used to dispossess and to malign, but stories can also be used to empower and to humanize. Stories can break the dignity of people, but stories can also repair that broken dignity." (TED: The Danger of a Single Story, 2009)

The ability to reject the single story, and realize that a single story about any place does not exist, is the first step in building relationships with cultures around the world. Through this course, students widened their views of the world by listening and embracing the numerous stories that were told, and applied this valuable perspective to realistic civic issues.

All communities throughout the world have resources within them. When communities invest their resources in different ways, they create capital. Cornelia B. Flora and Jan L. Flora, authors of Rural Communities: Legacy & Change (2008), established a framework for identifying the types of capital that scholars tend to focus on when observing communities. This framework divides the capitals into seven sections; these include natural capital, cultural capital, built capital, social capital, human capital, political capital, and financial capital.

While on the ground in Guadalupe, the UVM students dove head first into establishing relationships and building a relaxed rapport with the community. They did so in hopes of discovering and documenting how the Community Capitals Framework relates to community development, sustainability, and ecotourism in the area. The main form of data collection was through participatory rural appraisal, as it allowed students to investigate, and learn firsthand from community members. Students used the Community Capitals Framework to categorize and organize the collected data for the document.

Outside of Guadalupe, students were also challenged to think about rural communities in ways that go deeper than the casual tourist. While students engaged in reciprocal service learning, they were urged to further explore the impacts of participatory
rural appraisal versus rapid rural appraisal. Upon return, they also utilized many other online resources to fill in gaps and solidify all of the information that was documented.

From day one students were made aware of the goals of this service learning experience. While partaking in community service activities and simultaneously fulfilling academic outcomes, students formed relationships with the residents of Guadalupe that were reciprocal and mutually beneficial. Throughout the course, students were also challenged to think critically through reflection. This assisted students in affectively processing thoughts and feelings so each student could then draw his or her own conclusions about their experiences in Costa Rica.

This is not to say that the course came and went without days of overwhelming emotion, whether it was excitement, nervousness, joy, or frustration. There were moments of laughable stress as students wrestled with cross-cultural communication and stumbled over words trying to educate themselves about the community. Yet in the end this experience has been one to remember. It is our hope that we have created a profile that will act as a foundation for future groups to expand upon, benefiting Guadalupe and all of the surrounding communities.
Methods

The Definition of Rapid Rural Appraisal

Rapid Rural Appraisal (RRA) was the primary method used to collect data for this report. Information is gathered by outsiders using RRA in a flexible manner and in a limited period of time. RRA emphasizes the use of secondary sources, verbal interactions with people in the community, and observation (Chambers, 1992). This report uses many of these “RRA methods”, coupled with researching techniques from a similar method called Participatory Rural Appraisal (PRA).

RRA vs. PRA

Participatory Rural Appraisal stems from Rapid Rural Appraisal but differs in that PRA encourages data collection, presentation, and analysis by locals rather than just outsiders. PRA also stresses the development of a relaxed rapport between the researchers and the community members. The data in this report was collected using techniques from both methodologies. The research was conducted and presented by outsiders, but relied heavily on input from community liaisons and key informants. While a large portion of the data was based on observation, forming informal rapport and building trust with the community were the tools used at the core of our research.

The five main methods of RRA used in the creation of this profile include informal rapport building, primary data collection, secondary data collection, presentation of information, and reflection.

Preliminary research began in January 2014 at the University of Vermont campus by reviewing published books and articles. The bulk of the research was conducted during a field visit to Costa Rica from February 28th to March 9th, 2014. Most of this research was conducted within the community of Guadalupe.

I. Informal Rapport Building

Our group, from the University of Vermont, took part in many social events within Guadalupe to interact with community members in informal settings. This encouraged trust between the locals and the student group, as well as students’ exposure to general cultural and social activities. These included:

● Engaging the children at the primary school with planned art projects and athletic activities
● Holding a community barbecue as an introductory engagement between students and the community, where food was prepared alongside community members and door-to-door invitations were presented to locals in-person. During the barbecue students interacted with many community members (especially the kids) by helping to serve meals and aid the cleanup process at the end of the evening
● Playing a game of soccer with a group of men and women from the community at a local soccer complex
● Spending an afternoon with the women in the community, teaching them to make jewelry, crochet, and knit
Another method used to build informal rapport was teaming up with community liaisons - Shirley Largaespada, Pablo Largaespada, Elizabeth Guevara, and Walter Guzmán - to conduct research. Four community members accompanied the group in their daily activities and served as key informants. When conducting research, groups of UVM students teamed with one or two of the liaisons. They provided information about each type of capital within Guadalupe, helped to conduct interviews with community members, and often acted as translators.

II. Primary Data Collection

*Walk Around*

UVM students performed transect walks to observe and identify different zones, land uses, resources, and community hubs throughout Guadalupe. Each group was accompanied by a community liaison. This method was used to record natural, built, social, and cultural capital. Some of the class’s observations were used to check and update the map of the community constructed last year.

*Surveys of people in the community*

In addition to building informal rapport, the class performed structured interviews with community members, using specific lists of questions pertaining to each capital. Four different groups of UVM students and community liaisons went door-to-door asking the questions. Interviews were structured mainly around natural resources, human skills, cultural norms, financial norms, built infrastructure within the town, and issues within Guadalupe where locals would like to see change.

Although most of the houses within the community were interviewed, because the surveys were conducted during the day, some families were not home. Those interviewed were both male and female, however the female-heads of the households typically answered the door because the men were working. An effort was made to limit bias in this report by talking to people in a range of ages and of both genders.

III. Secondary Data Collection

Secondary data was used to supplement primary data in creating a community profile. The types of secondary data sources used include:

- Papers on the service learning pedagogy, rapid and participatory rural community development, tourism, ecotourism, and related case studies
- Websites by travel, tourism and conservation organizations, as well as other partnership organizations
- Government census and statistical reports

Research began with course readings selected by the professors in January. The first assigned reading was a book by Richard Slimbach about global learning, titled, *Becoming World Wise*, which helped prepare us for the cultural changes we should expect on the ground. Chapter excerpts from *Rural Communities: Legacy and Change* by Cornelia and Jan Flora, explained the methods of Rapid Rural Appraisal and Participatory Rural Appraisal, which guided the class’s methodology of data collection in the field. *Planning for the Rapid Development of Community Based Ecotourism Using Action Research: A Project Implemented in Rio Negro, Comayagua, Honduras* by Dave Kestenbaum and
Hybridization and Tourism Development Along the Rincon River by Walter F. Kuentzel exemplified what the finished products of global research and development projects should look like.

Secondary data collection was also conducted in Burlington, Vermont after returning from the Costa Rica trip through March and early April 2014. To enhance the primary data collected for the community profile, information was gathered using the University of Vermont Library online database of various scientific journals, as well as the Final Report completed in 2013 through the same program entitled Service Learning and Development in Guadalupe, Puntarenas, Costa Rica.

IV. Presentation of Information (Mapping)

Diagramming and analyzing collected data was an integral part of the organization and presentation of the information collected on the ground. This method helped to derive meaning and patterns from the data and contributed to a clearer understanding of the community. For example, we modernized a map of the built capital of the community that uses numbers to identify each building. The building’s number corresponds to information, such as what materials the building is constructed from and what the building is used for. In addition, social, natural and financial capital was depicted through the use of diagrams. The diagrams categorize the information collected with the community of Guadalupe based on their feedback to the survey.

V. Reflection

Reflection was an important component of the service-learning experience and the completion of the community profile. Writing in journals helped to focus and organize the student’s thoughts each day in the field. Creating a meaningful reflection involved relating the experiences in the field back to the core structure of our research, the Community Capitals Framework. Also, journaling helped students to distinguish effective data collection methods. For example, language barriers often limited student’s effectiveness in their collection of data. Therefore, students used reflection as a method for contemplating alternative ways to delve into community matters.
Political Capital

Political capital is comprised of organizations, connections, voice and power. It is “the ability of a group to influence the distribution of resources within a social unit” (Flora & Flora, 2008). The key concept behind political capital is power, or the capacity to affect others or events. With power, community members gain the opportunity to participate in decision-making that can impact various other sectors of the community. Political capital incorporates the formality of the government and the informality of local influential members of the community. To understand the level of political capital in the village of Guadalupe, the context of the Costa Rican government needs to be explained.

Costa Rica is divided into seven provinces: San José, Alajuela, Heredia, Cartago, Guanacaste, Puntarenas, and Limón. These are then further divided into cantones and then further into territories with municipal government headed by a mayor, or alcalde, which is elected by popular vote and appointed by the municipal council, or consejo municipal. The Costa Rican government, which is very similar to the US government, is a Presidential Representative Democratic Republic, which means that the people of Costa Rica vote for an official who then vote on certain policies. It is a Republic in the way that the people have a voice in the laws made. The government is divided into three branches: executive, judicial, and legislative. The president is head of the government as well as chief of state, and is voted into office every four years by a general election. The president has the power to appoint vice presidents and cabinet members. The Legislative Assembly, or Asemblea Legislativa, is made up of fifty-seven seats and each member serves for four years and elected directly by popular vote. The judicial branch is independent from the other two, and has a supreme court of justice with twenty-two magistrates selected for renewable eight-year terms by legislative assembly and subsidiary courts.

As a result of the latest election, Luis Guillermo Solis of the center-left Citizen Action Party (PAC) is now president (to be sworn in May 8, 2014). He was the favored candidate after rival, Johnny Araya, a National Liberation Party (PLN) incumbent dropped out of the election. President Solis is fifty-five year old history professor and former diplomat. The Citizen Action Party was founded in 2000 and has never been in power before this win. President Solís’s campaigned to tackle corruption and poverty in Costa Rica and advocates citizen participation in politics. This represents the power of the Costa Rican people at a national level in their ability to elect a president that represents their interests, especially following the controversial administration of former President Laura Chinchilla Miranda.

Puntarenas is the largest province in Costa Rica and home to the town of Guadalupe. It consists of eleven cantones: Puntarenas, Esparza, Buenos, Aires, Montes de Oro, Aguirre, Golfito, Coto Brus, Corredores, Garabito, and Osa. Guadalupe is in the Osa Canton, which has a population of 27,592 and spans 1,930 km. The Osa Canton was established by law on July 29, 1940. The mayor is Albert Cole, who was elected in 2006.

On a more local level, the village of Guadalupe does not have any formal representation of political capital aside from being a part of the Osa Canton and adhering to the municipal government. While getting to know the people of Guadalupe, the two theories of political power come into play in different circumstances. The theory of pluralism is grounded in the notion that “the capacity for acquiring power is widely distributed within the population” (Flora & Flora, 2008). This is exhibited in the way that
the community has a high value for the other members and they hold the means for change in Guadalupe. However, the theory of elitism is “based on the assumption that power conforms to the stratification system” (Flora & Flora, 2008) and is present in the community, particularly through intercommunity interactions. For example, there is a government-aided housing program that supplies new government built houses for those who meet specified qualifications. The federal program is to provide funding for a family to have a house built if they have proper documentation of land ownership and commit to stay on the property for at least fifteen years. The stratification, or the socio-economic divisions of a community, here is that the qualifications are difficult for the local people of Guadalupe to pass. Although only four percent of the population is illiterate, these people are concentrated, due to these socio-economic divisions, into certain areas, leaving large percentages of some towns unable to understand and fill out the appropriate paperwork.

Another seemingly common obstacle is the lack of public transportation and poor quality roads that prohibit people from going to the municipal government to obtain the paperwork or other necessary qualifications. Often, the municipal government gives someone in the community, whether it is a friend or family member, the power to choose which residents receive the new house. This was reported by many of the community members but was never proven through fact checking. Reportedly, many times, the families that actually needed the government aid did not receive it.

In addition to the government-aided housing program, the government built the primary school located in the center of Guadalupe and pays for a teacher. The government provides funds for supplies and a cook. However, it was also reported those funds are the minimum amount and barely cover the costs of the supplies, leaving the school underprepared and under qualified. This translates into a lower level of human capital in the community in regards to the education available.*

The government also provides electricity and telecommunication services via the Instituto Costarricense de Electricidad, or the Costa Rican Institute of Electricity (ICE), which is acclaimed as “a model in terms of its coverage, efficiency, social inclusion and environmental sustainability” in an article by David Chavez, a member of the Transnational Institute.

The two other government payments include a property tax and collective tax. The collective tax provides a garbage collection service. For the village of Guadalupe, there is one truck that comes every Tuesday and brings the trash to a dump located two hours away. This service is only three years old and represents the premature development of the village.

Although there exist many social and economic obstacles that slow the rate of development, Guadalupe, as well as neighboring towns such as La Palma and Puerto Jimenez, address developmental progress through the Development Committee. Our community liaisons, Eliza and Shirley, are the representatives for Guadalupe and La Palma, respectively. Currently, their main goals are to fix the La Palma community salon, build playgrounds for children, and establish a permanent office for the Committee for organizational and educational purposes. This office would be able to hold formal classes offered by the Instituto Nacional de Aprendizaje, or the National Institute of Learning, and serve as a place of reference for community members.

Political capital is personified through the community members that consistently work to improve the standard and quality of life of their community through increasing
government services. Our community liaisons are prime sources of political capital in their involvement and knowledge of the local people and environment. They feel confident as representatives for Guadalupe and dedicated to the development of Guadalupe by interacting with foreigners. Eliza is an influential member of the community and is a part of various committees that concentrate on the wellbeing of the people in Guadalupe. She is the secretary for Junta de Educación and the Comité de Deporte and the president of the Comité de Salud. She is a political activist who fights for the people’s rights of Guadalupe. She is a member of the transportation committee and the roadwork committee constantly campaigning the municipality for new roads, which many of the community members would benefit from as a source of stable employment. Another key example of political capital, as well as financial capital, in Guadalupe is Merlyn Oviedo, owner of the Danta Corcovado Lodge. With the lodge located in Guadalupe, it places the village in a prestige spot for development particularly to meet the demands of the growing ecotourism industry. The power the lodge holds stimulates economic growth, which increases the need for improved, built capital.

We measured the political capital of Guadalupe through a community survey. The survey questions posed were on a scale of one to five, ‘how much do you feel the government is aware of your needs’ and ‘how much control do you have over your own governing’. We found that although the majority, if not all, of the community placed very low faith in their national government to hear their needs, they also felt fairly confident in their individual ability to enact change within their community. This means that while many community members felt that the national government fails to meet their individual and community needs, they also felt these needs could be met by relying on their selves and their fellow community members. So, although the people of Guadalupe generally sense a lack of political capital in the inaccessibility of government officials, the overwhelmingly strong social capital (i.e. the connections among people, or the social “glue” to make things happen) that exists in their community is very much exemplified through this survey result alone.

Currently, the initial steps are being taken to implement political change in Guadalupe, yet more funding is necessary to truly break ground. One major improvement that many of the community members urge for is paving the roads. The roads in Guadalupe are made of dirt and riddled with potholes. Driving takes much longer than it needs to, which makes the village seemingly inaccessible and undesirable to invest, hindering the community’s power. Overall, for the political capital of Guadalupe to grow, political involvement needs to increase, as a way of exemplifying their potential power to instigate change in their community.
**Human Capital**

Human capital consists of the assets each person possesses: health, formal education, skills, knowledge, leadership, and talents (Flora & Flora, 2008). According to the Human Capital Index Report of 2013, “Human capital can be a more important determinant of its long term economic success than virtually any other resource... This resource must be invested in.” (World Economic Forum in Collaboration with Mercer, 2014)

**Current Human Capital of Guadalupe**

Guadalupe is a relatively recent community, as it has just begun to form and grow within the last few decades, spanning roughly three generations. Guadalupe started as a farming community. In this small community there seems to be a range of talents and skills, the most common was working with the land and farming. Even at a young age community members seem to know and value the natural resources available to them. Children of the community, when drawing pictures, seemed to all draw pictures of the river, plants, flowers and animals around them with big, bright suns. Merlyn Oviedo, a community leader who runs Danta Corcovado Lodge reiterated this sentiment when he said, “How can we be poor? We have land and can grow food? I’d feel poor if I could not provide my own food” in a conversation about why this area was considered to some as the poorest in the peninsula.

Per conversations with residents like Walter Guzmán, students concluded that it is currently difficult to make a living farming and people are seeking new ways to do so. Other economic drivers of the past include timber, cattle, hunting, and gold mining. Due to initiatives started to preserve the area’s natural capital, including paying locals to preserve land that they already own and also setting aside land in the larger preserve, it seems many people need to find use of their talents in other ways. One area that some residents are confident in is eco-tourism. Ecotourism can provide a win/win situation, bringing economic advantages to the area while preserving the area’s abundant natural resources. Some local residents of Osa, including Pablo Largaespaña, Andrey Gonzales Villalobos, and Jairo Tijerino attended vocational college, and hone skills as park guides.

Residents in rural communities, due to a lack of resources, have to attain a certain set of skills or they go without. “I’ve found that kids are more skilled here in Costa Rica than in the United States because you can’t just go out and buy things, you had to learn how to make or fix it” (Oviedo, 2014).

**Table H1. Unique Skill Examples**

| Walter Guzmán – Basket Weaver. Walter created the breadbaskets that were used at the Danta Corcovado Lodge. | Dress Maker – supplies most of the school uniforms to the children | Stone Carver – One family makes statues, furniture, and jewelry out of stone. | Merlyn Oviedo - Welder, builder, furniture maker. He used these skills to build the Danta Corcovado Lodge. Merlyn has entrepreneurial skills, which he gained from attending workshops. |
| Merlyn hopes to become a mentor to give other members of the community these skills so that the economic community in the Osa Peninsula grows. |
|---|---|---|---|
| Walter’s wife crochet’s hats used for decoration | Electrician – Fixes television and other electrical appliances within houses | Many freelance workers who are able to fix housing breakdown | Some cattle ranching and chickens being raised by numerous families |
| Decorative artistic bowls and vases made by women out of old magazine articles. | Artist – Provides hanging small circular canvases of local birds seen around the community | Butterfly sisters – Use current knowledge and skills learned over time to provide the community with extensive butterfly garden. Study the types of foods eaten by each butterfly in order to sustain. | See photos for number of households. And a list of skills, jobs, trades of community members complied by a community member (Guevara, 2014) |

**Building Human Capitol**

Global society focuses on education when discussing human capital. In 1948 Costa Rica disbanded its army and funneled funds into building human capital in the areas of
education and healthcare. The small community of Guadalupe with approximately 77 homes has a school with four buildings that serves children grades 1-6. According to one of the maestras, Otilia Comodio, the children are taught Spanish, Mathematics, Social Studies, and Science. Education is free, but students must provide their own uniforms and supplies. This could be a potential deterrent to education. The children the UVM students worked with all seemed happy to be in school. Almost all hoped to continue their education. Many of the 1-3 grade students hoped to work in the fields of architecture, construction, education, and human/animal medicine, all requiring continued education offered outside of Guadalupe.

Secondary education is offered in two forms, academic and vocational; upon graduation, both offer high school diplomas. According to one high school student, the subjects they learn in high school are more in-depth, such as biology and algebra, and English is introduced. Per conversation with Shirley Largaespada, a student must perform well on a standardized test, and receive at least 500 points on the educational grading system to be accepted into public university. If one does not perform as well on a test, they could go to private university but the cost and funding to attend is problematic for many people. From conversations with other community members and the schoolteacher, about 15 children currently attend the high school in La Palma; four are in vocational school studying to be nurses, a lawyer, and administrator. Only 1 student attends university from Guadalupe per year. Three are currently enrolled. A common deterrent of university attendance brought up among community members, was the lack of a University in the Osa Peninsula.

There has been one instance in the community where a member has attended university, and brought their skills back to the community. Shirley’s brother studied Agronomía/Agricultura, meaning the studies of agriculture and economics. He passed on his educational determination to Shirley’s three nephews who are currently studying at the public university. Most residents of Guadalupe however, have stayed in the more densely populated areas of Costa Rica once leaving. Although education and transportation is paid for by Costa Rica, Shirley shared that some students have struggled with the cost of housing, food, books, and other supplies, enough to drop out of university. Yet through the application to the public universities, one can receive scholarship money. (Personal Communication, Largaespada S., 2014)

Unemployment is prevalent, and many community members are forced to rely on government assistance. Community members hoped to see roads built and transportation to bring job opportunities to the community, such as labor to build roads and the ability to access where the work is. Fortunately, a school bus picks up the high school students in the morning and returns them back to Guadalupe mid-afternoon.

Merlyn, a community leader, states the most valuable gift he received was from the organization that not only provided education, but inquired about his needs, in order to succeed as an entrepreneur and sustain the infrastructure he built. The owner of the chocolate farm nearby Guadalupe, Alexander, was in the same program, and agreed it helped his business reach its current success, as well as supplied some of the information he shared with the class on a tour.

**Human Capitol and Health in Guadalupe**
As mentioned earlier, financial capital was funneled into building human capital through the education and health system in Costa Rica in 1948. Health care is provided to all Costa Rican citizens. Vaccinations are provided to children, and almost all children in the community were vaccinated (see Appendix A). Through public health initiatives, parents are provided a vaccination schedule and health related information via a health book. The book contains the necessary vaccinations and their timelines. The vaccinations necessary in the Costa Rica healthcare system are: Tuberculosis, Hep B, Tetanus, Diphtheria, Pertussis, Polio, Varicella, Measles, Mumps, Rubella, Pneumonia, and the yearly Flu shot. Along with that, the book contains a Growth Index, appropriate times to introduce food to children, date stamps of medications/vaccinations given, and information on what teeth induction should look like and at what rate. Most importantly, the book gives directions on how to adequately deal with asthma, respiratory infections, poisoning, contact with farm animals, and proper cleaning of cuts. This is important in preserving the human capital of the younger generation by preventing not only illness, but also altered development.

Per conversations with Shirley, there is limited access to healthcare. Residents often need to travel to La Palma. The doctor does visit the community, as does a mobile clinic consisting of a doctor, two nurses, and a pharmacist about once every 2-3 weeks. It is important to pay attention to mental health access (Flora & Flora, 2008), which is not offered by the mobile clinic and very scarce throughout the Osa Peninsula. There is a medical room located in the community center, but there were no discernible supplies. Community members the class spoke with did not identify any individual within the community that held medical knowledge, either standard western medical knowledge, traditional or homeopathic knowledge. Women do not have homebirths and per Shirley’s knowledge, do not utilize midwives. Many community members stated they would like to see a full-time clinic built in the community (see Appendix A). When asked questions about health, some community members reported chronic sickness such as asthma or heart related conditions, and described difficulty obtaining life and health sustaining medications. Most community members said they were sick at most twice a year, but for those who held a job still managed to get to work (Appendix A).
Photos Households skills, jobs, and trades held by community members - compiled by Eliza
**Built Capital**

**Development of the Area**

**Brief History of the Osa Peninsula**

In 1938 the Osa Peninsula began to see the face of modern development as thousands of hectares of forest and swampland was cleared for the creation of industrial sized banana plantations as the United Fruit Company laid roots in the area (Kuentzel, 2010). With these plantations came the development of built towns for employees, which generally included living quarters that surrounded a central field (primarily used for soccer), a church, and a general store.

Prior to the United Fruit Company’s development in the area much of the land in Costa Rica was underutilized and mainly inhabited by squatters, among who land rights were disputed. The Costa Rican government intended two uses for the land within the Osa, which would in turn hopefully establish ownership rights. One was the government’s aim for industrial investment in the land, making it more productive, the thought process being that with titled property companies would invest in the land and economy of Costa Rica. The second purpose was to ensure land access to all citizens. This was how the banana fincas, estate in Spanish (Harrap Publishers Ltd., 2006), of the United Fruit Company could be constructed. While the company left the region in 1985 their model and legacy left a lasting presence (Kuentzel, 2010).

By the 1950s the Osa Peninsula had seen an influx of people to the area all looking to cattle ranch. In 1950 a new company called Osa Productos Forestsales (Osa Forest Products, OFP) entered the region and continued the development of the area. OFP was granted 30,000 hectares, what is now the lowland area of the Corcovado National Park, from the government, quickly putting an end to the original farms in the area and displacing the famers and their families that lived there. OFP intended to clear-cut 1000 hectares every year, moving across their land until returning to the original plot, which was expected to be 30 years later.

Thankfully, this project never took place for two reasons. The first reason was that the farmers and gold miners of the area resisted eviction by the company and those who did leave were not paid fairly for their land. Conflict eventually became violent and the guerilla warfare occurred for a number of years, devastating both sides of the fight. The second was that OFP was found to be corrupt and in need of an assessment which was conducted by a congressional commission inquiry. By the end of this period in time it was decided upon that the 30,000 hectares, along with an additional 13,000 hectares, would be developed into what is currently the Corcovado National Park, covering nearly half of the Osa Peninsula (Kuentzel, 2010).

**Role of Gold in Development**

The mineral gold had a special role in shaping the development of the Osa Peninsula. Other than indigenous groups inhabiting the area, the first people to occupy space in the Osa were the Spanish conquistadors who were in search of gold. The region was known for being a large source of gold in Central America and highly sought after. Unfortunately the mineral was not deposited in an easily extractable way, discouraging the Spanish who quickly moved on to other regions. Yet in the 1950s gold was exposed once again in the area. Since this 1950’s gold rush to the area many people have remained gold
miners, settling in the area. It is still a profession practiced in the area in present day. The presence of gold in the Osa has shaped its history and those who chose to inhabit it.

Definition
Built capital is defined as “the infrastructure that supports other community capitals… Built capital can be appropriated by special intersects or be widely available to all community residents” (Flora & Flora, 2008). This capital can be observed in two ways. The first includes physical structures like houses, businesses, warehouses. The second is physical features like railroad tracks, bridges, electricity lines. “In the context of community development, [built] capital refers to buildings (houses, retail stores, factories) and infrastructure (roads, water, sewers) (Green & Haines, 2012).

Other capitals in a community are strengthened through built capital. The first group of built infrastructure, referenced here as “buildings”, include houses, schools, churches, warehouses and businesses, hospitals, community centers, grocery stores, libraries, universities, gas stations, essentially any infrastructure that comes in the form of a building of some sort. This type of infrastructure allows communities to educate themselves, have access to resources, build and develop personal skills. For example, a hospital is a crucial part of built infrastructure because it provides access to jobs and health both of which strengthen a community’s human capital. Religious buildings are important to enhance and preserve community members’ cultural capital. Community centers can be used to host meetings and various activities, increasing social and political capitals.

The second group addresses infrastructure which, in this report, can be understood as “utilities.” This comes in the form of roads, electric lines, sewer systems, bridges, parks, city services, telecommunications, and anything which allows the community to function. This form of built capital is important because without it, the community may not have access to running water, or be able to come and go from their community easily. For example, well made and maintained roads are necessary in allowing easy transportation within the community and out to other towns. Electric lines allow for community members to gain access to light after dark, television, charge electronics, etc.

A combination of buildings and utilities create a robust sense of built capital for a community. Yet unfortunately built infrastructure can be difficult to implement, generally due to a lack of financial capital. It takes a good deal of money to build a hospital or school and supply them with the appropriate resources. When a community lacks the monetary resources to invest back into their community generating built capital generally takes a back seat. Another setback to built capital is that some infrastructure takes more than just one community to ensure completion. The building of new roads or constructing public transportation are projects too big for one community to tackle. In other cases privatization of things like solid waste collection make it challenging for communities to have a voice in how these operations occur (Green & Haines, 2012).

History of Guadalupe
“To come to the Peninsula you had to come by boat via Golfito. And it took eight days for this boat to leave again, and that is why very few wanted to come, but little by little [they came], I don’t know how to tell you how hard we had it here - it would take until midnight. And that took us until 78 (1978) when the expropriation from Osa proceeded, and the Corcovado Park was created and all that, Because [the Park] didn't exist,
[it] was created once Osa left. Those lands were liberated. That is how it went.” These are
the worlds of Eladio Barroso, one of the originals to inhabit what is now known as
Guadalupe (Historical Beginnings, 2013).

Guadalupe officially became a town recognized by the government less than 10
years ago. Nestled in Puerto Jimenez, neighbors to La Palma and the Guaymi Indian
Reservation, it is without a doubt a neophyte village, and the lack of built infrastructure
there speaks to this. There are no paved roads in Guadalupe; in fact the road from the
Rincon River to Puerto Jimenez was paved for the first time in 2009 (Kuentzel, 2010). After
OFP was ejected from the area and the government created Corcovado National Park,
many of the farmers and gold miners who had fought OFP were displaced from their homes
because residence within the park was not permitted. According to Bernal Saldaña, another
founder, “We were displaced unfairly, because they claimed that the oreros destroyed (the
ecosystem). Unfortunately the orero weren’t doing the destruction, the problem was the
machinery [the corporations] were bringing, mostly to Tigre River, [but] as well as Rincon”
(Historical Beginnings, 2013).

The founding members of Guadalupe reached the area in the 1970s where nothing
but forested land and “mud pits” existed. People coming into the area were told that if they
wanted property on the land, their only responsibility was to clear it. Men would come into
the area and chop a big tree which would, on its way down, take out smaller surrounding
trees. People could return in a few months when everything was dead and burn it all (cite
Merlyn here – it was his story). As La Palma began to develop, people in the area began to
take up permanent residence there and work in fields of what is now Guadalupe. For years
the land that is now Guadalupe was used for farming, until people began to migrate into
the area from La Palma and other surrounding towns. After a decade of development, the
town’s built infrastructure includes 77 homes, 1 eco-lodge, 1 Mariposa (butterfly)
garden/center, 1 school, 2 small stores, 2 churches, and a community center with an outdoor
kitchen located within a large green, communal area. Electricity lines run the length of the
streets and potable water is available. Many residents of the area do not have a sewer
system and use outhouses on their property. It is important to note however that the built
infrastructure of Guadalupe is missing other key components such as a hospital, grocery
store, gas station, police station, etc.

Deeper Review

Homes

There are 77 homes in Guadalupe, most constructed from a mixture of wood and
concrete, others have been built by the government and are largely made of cement
and have glass windows. The homes can be found first surrounding the community plaza and
then growing out from there. The average property in the community of Guadalupe
occupies less than a hectare, however, there is a 45-hectare farm and a handful of other
homes that occupy greater areas of land.

Non-government built homes more often than not have windows that are simple
squares cut into the walls. Some have wooden windows that swing shut during the heat of
the day to keep the house cooler. Typically there is no barrier from the outside other than
the occasional metal fencing. Roofs are usually made out of tin with the occasional use of
tarps for living areas outside of the main building. Many properties that have more than
one home and/or building., These include out-houses, storage structures, work stations,
etc. It is not uncommon for homes to have dirt floors while others are concrete. A number of the homes in Guadalupe have front porches or patios made either of wood, concrete, or dirt with a chair or two.

In Guadalupe, there are 16 homes provided by the federal government and 5 from an organization called Costa Rica-Canada. Federal government built houses are achieved through a federal program that will build a home for free, so long as the person owns the land and agrees to stay located in the area for a minimum of 15 years. The government built homes consist of two or three rooms constructed of cement walls and floors, glass windows, a wooden door, and indoor plumbing. However, they do not include kitchens. Most people have built open-air kitchen behind their homes.

Costa Rica-Canada is an organization that has 24 years of experience and prides itself on its service and commitment to the search for a better quality of life. Thus, they focus on ‘neighborhood improvement’ which includes providing homes and installing hydrants, storm drains, gutters, and sidewalks. The organization has helped to finance more than 40,000 homes to date. Today, their mission focuses on increasing housing availability, supporting small and medium businesses, and working with government partners on their care and neighborhood improvement programs.

**Potable Water**

Potable water in Guadalupe is tested and has to meet water quality standards to be deemed safe enough for consumption by humans and can be used for anything from household needs to landscape irrigation. National government regulated water is accessed through aqueducts and can be very expensive. In response to this Guadalupe found an alternative supplier, ASADA, to ensure access to potable water. ASADA aims to provide “quality, quantity and continuity” drinking water to communities with the driving concept of “motivating the community in reforestation, conservation, and environmental protection” (ASADA Tacares South, 2009). ASADA believes that water is a right for all and that by raising awareness on water and environmental quality, through community involvement, water can be sustainably utilized by present and future generations. Water quality management is performed once every month by ASADA, which provides clean water for drinking to everyone within the community. Outside each property there is a water meter, which measures the amount of water each household’s uses per month. The meters allow for an ASADA employee to determine each household’s water use and then calculate the household’s monthly fee.

**Electricity**

The Instituto Costarricense de Electricidad (ICE), is a government run municipality which provides electricity to those residing in Guadalupe. ICE doubles as an electricity provider and telecommunications provider. ICE emphasizes their ability to satisfy the needs and expectations of all customers by working with social and economic development, the environment, and quality of life. It is important to note that while electricity wires and poles line the roads of Guadalupe not every home has access to electricity. There are streetlights in Guadalupe, which come on around 6:00 pm every evening, but often turn on and off throughout the night.

**Crime**
While no physical police station or police force exists in Guadalupe, crime does not appear to be a major problem. A number of community members reported that part of what motivated their move to Guadalupe was the lack of crime. The closest police force to Guadalupe is in La Palma, a town only eight minutes down the road. This is the primary police force Guadalupe has access to, yet unfortunately there have been issues in the past where police have not responded to calls made from Guadalupe. While a personal police force and station for Guadalupe does not seem to be a crucial need within the community, the expected growth in the next ten years may call for a reassessment of this.

**Specific Built Infrastructure**

The school, Escuela Ida Guadalupe, is a prime example of built infrastructure in the community. Built ten years ago when the town was formed, all children in the community under the age of thirteen attend the school. The property itself has a structure with two classrooms, a kitchen, and closet. Attached to this structure is a bathroom, which is accessed outside of the classrooms. There is also a storage shed towards the back of the property. Places of education are key infrastructure to empowering a community. A school is a place where people can gain access to education and knowledge, which will expand their views of the world, their skill sets, and open the door to more possibilities. Educated people are empowered people and built capital, such as a school, aids this.

Morpho De Osa, or the butterfly garden, is another form of built capital infrastructure in the community. The butterfly garden is exclusive to women in order to give them a chance to participate in the community and a chance to gain an income. All the men in the community already have jobs so Morpho De Osa was created so women in the community had purpose as well. The butterfly garden is not only a business, but also an educational tool for those inside and outside of the community. New to the community the site has three butterfly-greenhouses, one storage shed, and an open area with a bar and picnic tables. Women in the community are empowered through their involvement with Morpho De Osa and find personal satisfaction in the opportunity to earn an income.

The Danta Corcovado Lodge represents built capital in a unique way. The lodge opened ten years ago and has increased in size until its present day infrastructure of six bungalows, one dome room, a house, the primary lodge, and the dining area of lodge with a kitchen and bar. The lodge has generated money within the community, provided jobs for residents, and encouraged outsiders to visit Guadalupe, putting the town “on the map” in a sense. The lodge has been able to share the community’s natural capital and cultural capital with those visiting. Danta Lodge’s presence in the community has an unmistakable impact on shaping the town and its current status.

**Conclusion/Future**

Currently it seems safe to say that built development in Guadalupe is low. While housing, a community center, butterfly garden, village green, school, two stores, two churches, and an eco-lodge do exist within the town much more is not present. The roads are not paved, there is no hospital or university, there are no businesses or factories in the village aside from the two small stores, there is no gas station, nor does everyone have access to telecommunications.
In a door-to-door survey conducted by the class, one-question students inquired about concerned development in Guadalupe. The class asked “what type of development/infrastructure would you like to see in Guadalupe in the next ten years?” Every resident mentioned infrastructure from the first group, essentially infrastructure in the form of a building. The top three highest requests were for more churches, a supermarket, and a health clinic. Hopefully the UVM class that returns to the village in ten years will have seen this requests fulfilled and part of the community.
NATURAL COVER PAGE
Natural Capital

Located in Central America, Costa Rica is a country bordered by Nicaragua to the north and Panama to the south. The Pacific Ocean is on Costa Rica’s west coast and the Caribbean Sea on its east. The climate of Costa Rica is tropical year round as it sits so close to the equator. The wet season, locally referred to as winter, lasts from May to November, while the dry season, referred to as summer, lasts from December to April. There are many different microclimates and forest types in Costa Rica such as the tropical dry forests further north and tropical rain forests in the southwestern region of the country.

Costa Rica is divided into seven different provinces. The Osa Peninsula is in the southwestern region of the country, in the province of Puntarenas, also where the town of Guadalupe is located. Osa is home to more than half of the all plant and animal species living in the entirety of Costa Rica. This is significant because Costa Rica contains roughly 5% of the world’s biodiversity. The Osa is roughly 300,000 acres. It is one of the wettest places on the planet, averaging more than 360 inches of rainfall annually.

Located on the Osa Peninsula is Corcovado National Park, a protected primary rainforest, rich with biodiversity that attracts sizable number of tourists each year. Corcovado National Park was once a hotspot for gold extraction and hunting. Since 1975, however, the park has become a Osa Conservation Area managed by SINAC, the national parks administrator in Costa Rica established by the Ministry of Environment, Energy, and Telecommunications (SINAC, 2014). Since Corcovado National Park was established as a conservation area, residents of surrounding areas have experienced loss of job and food sources.

On the Osa Peninsula, the town of Guadalupe is located near the eastern coast of Golfo Dulce. The Guaymi reservation, the Rincon River, and Corcovado National Park all border Guadalupe. Guadalupe is a town full of natural capital from its abundance of fruit trees and vegetation to its numerous animals. The most common produce grown in Guadalupe include mangoes, plantains, oranges, avocados, bananas, coconuts, lemon grass, sugarcane, leche, chiles, cilantro, almonds, papaya, cashew nuts, square bananas, yucca, and cacao.

The community members use numerous plants for medicinal purposes. *Hombregrande* is a plant that is added to a drink for someone who is suffering from a fever. It is believed to purify the sick person’s blood and rid their bodies of the fever. *Noni* is an evergreen plant that is used for anti-aging purposes. The leaves of a bellyache bush, also known as *frailecillo* are used to cure ulcers and wounds. The leaves and stems are shredded, and added to water for drinking. The stems are also thought to work as an anti-cancer agent (Cruz, 2011). Most houses have at least one, if not a few, types of fruit trees growing in their yard, decreasing the need to buy produce. Meat is purchased at a local grocery store in the neighboring town of La Palma. Cows raised in the fields surrounding the town are sold for meat.

In years past, cedar and teak trees were a significant export for the town, used to build houses and make furniture. However, due to massive logging and little replanting, cedar and teak groves have diminished, causing many households to lose their main basis of financial support. Recently, these trees have started to make a revival in the area with careful government oversight. The *Poro tree* is also common, and is a very important resource for local farmers, who use this tree to fix nitrogen levels in the soil. The
Guanacaste is the national tree of Costa Rica and can be found throughout the village. The flowers of an important plant called *Yoling Yolang* are used for their essential oil as the base for many popular perfumes.

The Rincon River flows from the highlands of Corcovado National Park and makes its way into Guadalupe (Kuentzel, 2010). It has a very unpredictable flooding pattern, which can be detrimental to farmland. Flooding does, however, deposit quartz, which local artisans carve into trinkets to sell to tourists. Families spend afternoons cooling down in the river and walking along its banks. Farmers are no longer allowed to graze their cattle along the river, in an effort to protect the river from degradation. This is a potential problem for farmers who relied on the river for a source of water.

In the past, floods have destroyed houses that border the river. On numerous occasions the community has come together to plant trees that they believed would minimize the amount of water damage, however little progress has been made to mitigate the problem.

**Farmers and conservation programs**

Land use is a very important issue to many people in Costa Rica. It especially affects people who live in places adjacent to national parks. Regulations and laws may force people out of their traditional work, such as gold mining, affect the productivity of their farms, and even displace them entirely.

Farmers rely heavily on the government not only to protect the surrounding land but also to not encroach on their land. Landowner and horse breeder, Guillermo Fernandez Trejos or “Memo”, described how the government sometimes expands the borders of the national parks, in this case, Corcovado National Park, and takes land from the farmers. This happens with hardly any fiscal compensation from the government. However, the government will pay people for land if they put it into conservation, revoking any land use rights. The landowner still owns the property, but the government and sometimes non-governmental organizations, pay them not to use it.

Memo has about half his land in conservation and on the other half his son raises 40 head of cattle. Memo receives payment from the government for the land in conservation of about one million colónes for 32 hectares of land. Greater profit comes from raising cattle, yet half his land is in conservation because there would simply not be enough time to care for more cattle. Memo is a strong believer in leaving some trees in the fields where cattle are. Trees are important for providing shade to the cattle in the heat of the day. Although the trees may lower the grass production and therefore the efficiency of raising cattle by a small amount, it keeps the cattle much happier and healthier. Memo also raises horses, which according to Walter Guzmán, a community liaison, are of very high quality. These horses are sold for profit as well as used for transportation. Horses in Guadalupe are also bred to donkeys to produce mules, which are then sold for a high price.

Many people in Guadalupe, according to the town-wide survey conducted during the classes stay, believe that conservation is a very good thing and important. But from what we took from our short time in Guadalupe was that few truly understood how conservation affects them personally. The biggest problem Memo has with conservation is the implementation of government policies. He does not believe it is fair that the government does not always pay for the land. The government program that does pay people for reforestation, sustainable forest management, and forest conservation of their
land is called PSA (Payments for Environmental Services). The goals of PSA include conservation of remaining natural forests, promotion of forest resources for timber production, income and rural employment generation, and fostering agroforestry activities between small and medium sized landowners (Zbinden 2005).

Non-governmental organizations from the United States, Canada, and France provide funding for programs that support conservation. The work that these NGO’s are doing provides the funding necessary to keep the land in conservation. This is critical considering the Osa Peninsula is one of the most bio diverse places on earth, with an estimated 2.5% of the world’s species (half of the total biodiversity of Costa Rica). Because the land is still privately owned, it gives the landowners incentive to take care of the land and regulate it themselves, rather than relying on the government to do so.

The interview with Memo was inspired by a visit to Finca Köbö, a sustainable chocolate farm. Alexander Retana Mena, ‘Alex’, created the farm by using the land differently then his father had. He puts into practice what he hopes will be a model for sustainable farming practices. Half of his land is in conservation and includes primary and secondary forests, regeneration areas, and biological corridors (Mena, 2014). Regeneration areas are spaces that have previously been used by other farmers and are now given the chance to grow wild again. Biological corridors are strips of land that are left intact, connecting two otherwise isolated wild areas and are very important in enabling species to move through many areas. Overall, if more land is provided for species to move around, a greater number of species can be supported (Forman, 1976).

Alex puts a lot of emphasis on the benefits of conservation areas in and around his farm. One benefit is nutrient recycling. The more forest and animals there are means the more fertilizer is available. Sustainable practices are necessary to have a productive farm in the long run. Crop rotation keeps the soil full of nutrients. For example, Alex grows a particular type of plant that fixes nitrogen in the soil throughout the farm. He also uses natural fertilizers including compost and manure and uses plants with pest control properties around his crops. Large companies have been growing the same crops, such as bananas, in the same plots of land for twenty or more years, which means the soil is very nutrient poor. It would be more effective to rotate crops because they would require less fertilizer. Alex rotates his bananas after six generations of plants. Large companies also use spray fertilizers and pest controls that have toxic effects on other organisms and are especially dangerous in the runoff water that drains into surrounding ecosystems, including the ocean (Vought, 1994). Instead of pesticides, Alex plants different types of vegetation with pest-repelling properties.

The cultivation of heirloom crops is an important aspect of Finca Köbö. Heirlooms crops are not typically as visually pleasing or as uniform as genetically modified crops, but are always much tastier. Organic heirloom crops are especially unique from traditional crops because they do not use agrochemicals to protect the plants from pests. An important aspect of farming is that the buyer of the produce determines the farming practices. For example, to sell to Western markets, the crops need to look perfect; taste is not the priority. Because the market determines farming practices, this has huge implications for conservation. It is important for people to support organic and sustainable farmers not only so they can continue farming and compete in the market, but also so other farmers begin to adopt these same practices.

Several years ago when Alex’s father was a farmer, the standard practice was to
kill the animals that ate crops. However, this is very detrimental to their populations, considering the farmland replaced what could have been useable habitat for them. Alex practices a method of farming in which around the outside of farmland, crops designated to animal consumption are grown. Monkeys are a huge consumer; they consume about 50% of the bananas and 10% of the cocoa grown in the farm. By planting crops around the perimeter and putting an undesirable crop in between those then planting more bananas and cocoa on the inside of the farm crops are protected.

Development in the 1970’s was so quick that there was not a lot of time for environmental regulations to be implemented. Between 1950 and 1980, Costa Rica became the cheapest and most efficient coffee producer in the world (Travel Resources, 2014). Coffee, among other industries, drove massive amounts of development of forest into farmland, the creation of roads and highways, and land titling laws. Policy-making did not have time to catch up. The rapid deforestation to clear farmland resulted in soil erosion, fertility loss, and over-fertilization of coastal habitats by a contaminated watershed, among other problems. Programs such as PSA have been created to incentivize landowners to protect their land. However, participation in such programs tends to be limited towards farmers who have a lot of land. Smaller farms do not typically have enough land to take out of use and still make a profit (Zbinden, 2005).

**Biodiversity in Guadalupe**

As mentioned above, Costa Rica encompasses about 5% of the world’s biodiversity. If you spend only one night in the jungle of Costa Rica you can hear the biodiversity all around. You are immersed in the sounds of birds, bugs, and creatures you may not even see or have heard. There are frequent rainfalls daily in the wet season, which is essential for the maintenance of green life, animal life, and water flow. The rain drowns out any other sounds and soaks through everything not under a roof.

Among the many fruits and trees mentioned previously, there are still so many more to be discovered by future classes. Upon a visit to Finca Köbò Chocolate Farm the class had the chance to taste cacao beans. The texture of the bean is slimy, but they leave a sweet taste on ones tongue. The cacao tree that produces the highest quality beans is the *Criollo* type. The class had the chance to taste heirloom star fruit and lemon, as well as a hybrid that would be sold to Western markets. Guava and Ice cream beans are also popular fruits. The ice cream bean has a taste and texture much like that of the cacao bean but a bit sweeter, and grows in a large green pod.

The diversity of the plants in Costa Rica is unbelievable. A specimen of the national tree of Costa Rica, the Guanacaste, stood less than half a mile down the dirt road from the Danta Corcovado Lodge in Guadalupe. The trees’ seeds can be found on the road in about a four to six inch curved brown pod encapsulating brown beans with a black oval. These seeds along with coral beans, which are red and also found in a longer brown pod, are used for making jewelry. Along with the Guanacaste, teak, poro, fig, and cedar trees, there were also Achiote or *Lipstick trees*. The Lipstick tree has tear drop shaped, red-pink pods on it that contain tiny seeds that are used to make dye or paint, used for body paint or on paper for a longer lasting creation. Additionally, a flower commonly known as *hot-lips*, is also known in Costa Rica as *labios de puta or hookers lips*. They are called this because upon holding the petals up to your mouth they resemble nothing less than a big pair of red lips. Another flower, the *heliconia*, is cherished because of its *sexy pink* color and can be sold
for a high price. Other flowers found in Costa Rica are the dormilona plant, floss silk tree, and arabica flower or coffee plant.

“The Sexy Pink” Heliconia flower (left), Arabica flower-coffee plant (right)

Dormilona flower (left), Floss silk tree (right)

The biodiversity of Costa Rica is not limited to plant species, there are many animals as well. The list of animals the class had the opportunity to view is quite long but ranged from creatures with fur to those with stingers. The jungle is magnificent with the array of creatures supported there. Overhead, scarlet macaws caw loudly, appearing only as a flash of rainbow feathers. In trees, resting on the branches with their long beaks, toucans with brilliant feathers can often be found. Squirrel monkeys jump from tree to tree, sometimes with babies on their backs.

The wildlife activity even around human populations, including Danta Corcovado Lodge is incredible. Scarlet macaws, toucans, hummingbirds, as well as countless butterflies including the Blue Morph, Owl butterfly, and a Urania Swallowtail Moths. There are also many lizards such as the slender anole lizard, brown anole, iguanas, whiptail lizard, and helmeted lizard as well as scorpions and snakes.
Survey Data and Community Lesion Insight

Survey Data

While in the town of Guadalupe, a survey of the community members was conducted. Two questions were asked regarding the natural capital present in Guadalupe. The first question was on a scale of one to five, *how well do you understand the conservation efforts in your area?* one being not at all and five being completely. The majority of the community members answered that they understood the effort, many citing the PSA programs. The data is displayed in Figure 1 below.
The second question was on a scale of one to five, “how much do the conservation efforts in the area affect you?” one being not at all and five being a lot.

The major response to the second question was “a lot” because many of the families relied on Corcovado National Park for their main source of income. Income from the reserve comes in the form of employment as tour guides for tourists attracted by the park. Some families also receive payment for land they put into conservation through the PSA programs, as discussed above.

Although a majority of people believe that conservation efforts do affect them, many did not. This was an interesting response considering their intimate relationship with the land. A possible explanation is that they think of conservation solely as the economic benefits from PSA-style programs.

Community Liaisons
The community liaisons provided a deeper understanding of the effects of conservation efforts in the area as well as a brief overview into some of the most valuable natural capital in the area. One particularly helpful community liaison, Walter Guzmán, explained that locals struggle to decide whether they should use their land for farming or put it into conservation. The compensation they receive for preserving their land tends to be much less than they would receive from farming or raising cattle for beef. However, conservation requires a smaller initial investment and is a lot less work than maintaining a farm.

Walter believes that the overall conservation efforts in the area are beneficial to the community and will lead to positive changes. Some of these changes include an increase of job opportunities as guides, lodge employees, and artisans, among other entrepreneurial efforts, for example, Finca Köbö Chocolate Farm.

Community liaison Pablo Largaespada acted as a primary source of information on the effects of NGOs in the area. Many of these Non Government Organizations come into the area with only personal gain in mind; they use the natural and human capital for profit then leave the community. Pablo is not fond of working with these kinds of organizations.

Pablo provided information on how to approach community members for questioning since they could possibly be hesitant about interacting with the class due to the negative impact that NGOs such as the ones described above have had on the community in the past. He informed us that the community members are most interested in conserving the river running through their town because it provides them with a source of water, recreation, and fertile land. Community members are concerned about where their tax money is going. They want it to go towards conservation of the local natural capital yet they aren’t sure if it is currently being used this way. This uncertainty has created a low trust in the national government in the community.

Conclusion

Even though it covers only 0.01% of the world, Costa Rica is a biodiversity hotspot: one of the most bio diverse places on earth. The Osa Peninsula, is biodiverse; having over half of all species found in Costa Rica, making it an extremely important conservation area. Living adjacent to such an area affords many challenges, but offers many benefits as well. The rich biodiversity attracts tourists from around the world, generating jobs in a place that could otherwise lack international opportunity. Conservation programs are essential for the continued protection of the land as the population and economy grow. Considering that 26% of the land is Costa Rica is under conservation, it is no surprise that the future will hold increasing pressure on the ecosystem and the programs that are protecting it (The Nature Conservancy, 2014). Since biodiversity is supposedly one of the main drivers of economic growth, the population will have to learn to use the land sustainably or risk losing the main industry, nature-based tourism. Some ideas of steps for promoting sustainability include: educating the public on environmental problems and ways to protect it; implementing stronger conservation programs and devising ways of enforcing them; supporting NGOs who work to benefit the community not themselves; and perhaps most challenging of all, changing international markets to encourage the demand is for organic, sustainable crops and products.
Cultural Capital

Cultural capital is defined as the knowledge, skills, education, language, and customs that are passed down from one generation to the next. It varies from place to place and is used as a tool to evaluate and understand the beliefs and traditions that are practiced within certain communities. A large contributor to ensuring cultural capital are parents because they provide their children with the resources and tools necessary to enhance their understanding of specific customs and skills that are relevant to their lives. To evaluate cultural capital in the town of Guadalupe, the class focused on specific areas, such as folklore, machismo, religion, and Guaymi language. Through a series of questions, observations, and practices, the class was able to obtain information that provides one with an understanding of the culture of Guadalupe. This information gave UVM students insight into the community- how the community members value certain customs and traditions that reflect their opinion of their town, as well as their hope for the future.

Guadalupe is a relatively small community that sits on the edge of the Rincon River and is located near Corcovado National Park. Most of the members in the community interact with one another and have a similar set of skills that they learned while at one of the schools located in or around Guadalupe. There are certain places within Guadalupe that allow community members to come together. Some of these include the two local churches, the recreation center located in the center of town, and Danta Corcovado Lodge. The class observed that a number of children and teenagers enjoy hanging around the soccer field that is directly outside the recreation center. There was also an outdoor kitchen near the recreation area, which has been built on the field and is used by most community members for special events and community meetings. While the class was staying at the lodge the opportunity to interact with certain members of the community who explained some of the community’s customs and religious practices. Students were able to learn a great deal of information about certain languages spoken within the community, as well as other information that was very useful for the final report on the town.

Before leaving for Costa Rica, UVM professors explained to the class that machismo is expressed differently in other parts of the world than in may be in Vermont. This may be one cultural difference we would notice while in Costa Rica. Machismo is associated with a strong sense of masculine pride, with a supreme valuation of characteristics culturally associated with the masculine and a denigration of characteristics associated with the feminine. The general feeling amongst the students in the class was that there were many examples of machismo present visible through certain people in Guadalupe. Students had the opportunity to sit down with Shirley Largaespada, one of the community liaisons, and other women in the community. The setting was very informal, and allowed students to gather insight of the women’s perspectives about machismo in Guadalupe. All of the women in the community the class spoke with agreed that machismo is a prevalent among the men in the community. The women mentioned how they notice such behavior sets a poor example for the children. When speaking to a group of women at one of the events that the class had organized at the recreation center, the women seemed a bit apprehensive to share information about this topic. Fortunately, Shirley was not shy to opening up about this topic, and shared a lot of information.

Machismo culture is visible in Guadalupe, and surrounding towns we visited. Its presence limits the power and influence of women. Due to this, most women in the
community do not go to work, but rather work from their homes and generally focus on cooking and cleaning for their families. It is not common for women living in the village to obtain a higher level of education. Aside from working, Shirley pointed out that machismo affects women in their own homes. Some women are not allowed to wear makeup or dress up when they leave their homes. Their husbands can be verbally abusive and dictate their role in the community. Fortunately, most of the women in the community appeared to have a firm understanding of machismo and developed ways to manage it within their lives. Students were surprised when men in the community were shocked that we raised the issue. All men had the same response, essentially saying that machismo is not a problem in the community at all. When this was passed along to Shirley and some of the other women, they just laughed.

Aside from machismo, another area that the class focused on in the community was folklore. Students were able to gather information about some of the traditions that are passed down from family members, as well as certain stories and myths that are discussed in the community. Presented with the opportunity to speak to Walter, he told us of two Costa Rican myths that have traveled throughout the community. *La Llorona* and *La Mona* are very popular to share in Guadalupe. *La Llorona* or the crying woman, is about a woman who drowns her children in order to be with the man she loves, only to soon regret it. *La Mona* is about a magical creature that looks like a small monkey with wings, which eventually turns into a beautiful creature. According to Walter, both of these myths are very well-known in the community and are passed along through different family members. Pablo Largaespada, another community liaison, informed the class that these two myths, along with three others, are part of a famous book in Costa Rica. The book contains a series of myths and stories that have traveled down from generation to generation, and are the most prominent.

In addition to the Costa Rican families who moved to Guadalupe, the subculture of the Guaymi indigenous group diversify the cultural landscape of the town, in the myths and legends that they carry with them. One of the many cultural characteristics they have brought is their religion, known as *Mama Tata*, which emphasizes speaking often to God. Weekly, many members of the Guaymi group attend Catholic service since the two religions are very similar in their beliefs and practices.

The members of the tribe who live in in Guadalupe reported to our group they have not had a hard time transitioning into the community. This is primarily due to their close proximity to the Guaymi reserve and the community’s openness. Though there did not appear to be resources within the community of Guadelupe to further the Guaymi children’s education of their cultural background or language, it seemed the members of the group work together to keep their traditions alive outside of the reserve. For example, the children are able to understand the language, *Cabeca*. Therefore, the burden falls upon the families to keep the language alive within their homes. Another factor our class thought might makes it difficult for the Guaymi members to maintain their culture in Guadalupe is the lack of opportunities to connect with each other. In an effort to prosper in the community, members often begin to assimilate to the Guadalupe culture, our class thought this might make it easy for their own culture to get lost in the process of becoming more engaged in their new community.

Often times the Guaymi leave the reserve due to needs that cannot be met there. For two of the families the class spoke with, it was medical reasons that brought them to
Guadalupe, as there were no medical services on the reserve. In the case of the first, the husband was having leg problems and coming to Guadalupe offered him easier access to medical services in surrounding towns. Though travel from Guadalupe to the reserve isn’t easy, both families still make an effort to go and visit with family members who have remained there. This is another example of how the Guaymi culture sustains itself within Guadalupe.

Religion is considered a large part of Costa Rican cultural capital nationally. However, in talking to the members of the Guadalupe community, one can see a much smaller percentage of the community actively participating in religious activities. There are two organized churches in Guadalupe, an Anglican Church and Catholic Church. While the Anglican Church has a physical location, the Catholic Church was in the process of being rebuilt after severe termite damage. As of March 2014, missionaries were visiting Guadalupe to aid in the rebuilding process. The Anglican Church meets every Friday with about ten people in attendance. The Anglican pastor is a traveling minister and commutes to Guadalupe from his home church in La Palma. The Catholic Church on the other hand has twenty members and meets the fourth Saturday of every month. The Catholic Church has existed for over twenty years, while the Anglican Church has for slightly less at eighteen years. In both cases, parishioners bring their own bibles to the services, as the churches are unable to afford bibles.
Financial Capital

Cornelia B. Flora and Jan L. Flora (Rural Communities: Legacy & Change, 2008), define financial capital as money that is used for investment rather than consumption, which can be utilized in communities by the means of the state, market, and civil society. This is the money that is used by a business to purchase their products or provide their service. Financial capital can be quantified using poverty rates, new business development, economic income, and conditions of infrastructure. A combination of all seven capitals can lead to a balance of a healthy ecosystem, social inclusion, and a strong economy.

In 2013, Costa Rica was home to 4.7 million people and had a relatively low GDP of $61.43 billion, yet has a constant economic growth of 4.5% per year. This developing country has an unemployment rate of 7.9% with 24.8% of the population falling below the poverty line. On a national level Costa Rica imports average $17.56 billion in goods and export $11.44 billion in goods.

Still known as a major exporter of agricultural products such as fruit, cattle, and timber, Costa Rica has recently expanded their manufacturing exports. The industrial sector growth rate has increased to 4.3%. These industries include microprocessors, food processing, medical equipment, textiles and clothing, plastic products and fertilizers. The labor force by occupation has also changed with 64% of those employed in services, 22% in the manufacturing sector, and 14% in agriculture. The total value of all final goods and services produced within the economy during one fiscal year is being led by service sector at 72.5% followed by the industry sector at 21% and agriculture falling to 6%.

Guadalupe, as a small rural community, has a very informal economy that is characterized by a variety of short-term work opportunities and an overall lack of permanent employment opportunities. Many members of the community however, receive an income from economic opportunities in the greater area, though often still on a short-term basis. Within Guadalupe, people work approximately 5 hours a day roughly 6 days a week, Monday through Saturday (Guzmán, 2014). Casual short-term jobs may include cleaning or cooking, construction work, security work, and harvesting crops (Guzmán, 2014) (Survey, 2014)(The Nature Conservancy, 2009). Some community members engage in long-term endeavors like selling handcrafts or contracted products such as clothing or perfume (Guadalupe Survey). Gold mining was once a larger industry on the Osa Peninsula before more restrictive conservation legislation was enacted, but some members of the Guadalupe community still seek an income mining for gold in designated areas (Guzmán, 2014)(The Nature Conservancy, 2009). Many community members grow various crops and raise livestock for subsistence and at times to sell when a surplus is available (Guzmán, 2014). The people of Guadalupe are recognized, as having some of the lowest income in Costa Rica. This is a reflection of the primarily financial metrics used to assess poverty levels. Most local community members do not feel they are poor however, as they live happy lives with an abundance of food and social interaction (Oviedo, 2014).
Figure 1.1 This data is based on the answers from three questions recorded from the door-to-door, 10-question survey of 40 people. It demonstrates a high level of unemployment, especially among women. This finding was validated in conversations with female community members regarding employment opportunities. As many of the employment opportunities in Guadalupe are temporary or seasonal, unemployment rates often fluctuate dramatically throughout the year. Many of Guadalupe’s unemployed still have a source of income through a family member or government services. This graph should not be used as a 100% accurate representation of Guadalupe’s employment rate.

Some local job opportunities include a commercial lodge called Lapa Roja that employs community residents to cook and clean on a short-term basis (Guzmán, 2014). The nearby Danta Corcovado Lodge, also in the tourism and hospitality business, provides the only year round stable jobs in Guadalupe (Oviedo, 2014). As of March 2014 Danta Corcovado employs eight full time and about four part time employees (Oviedo, 2014). The owner, Merlyn, noted difficulties he has had with the work commitment of past employees from the community who might skip work because their understanding of employment is one of casual agreements rather than a formal contract.

The United Nations Development Program granted $23,000 for the materials needed to build the Mariposario Butterfly Project. The project aims to produce and export butterfly pupae to generate a profit. The first two years of the garden’s existence operated under non-existent profit margins and often at a loss. The Garden employs women only because employment is harder to find for females in Guadalupe (Figure 1.1).

Palm oil production is a somewhat significant facet of Guadalupe’s economy. Palm oil is derived from the fruits of the African Palm Tree and is a major global commodity. In the nearby town of La Palma, the Palma Tica Company runs a large scale, 300-hectare plantation that employs a small number of people from Guadalupe (Guzmán, 2014). Smaller palm oil operations within the community also offer employment opportunities on a seasonal basis for harvesting. There are approximately four palm oil plantations in the area surrounding Guadalupe.
Financial capital in Guadalupe sometimes comes in the form of donations, investments, or loans for business development. Non-profit organizations and the government will often donate money to initiate business ventures and build infrastructure that will benefit business. Too often however, after initial investments are made, the non-profit or government workers leave and provide no further guidance for the startup, resulting in failure of the business (Oviedo, 2014). But not all business development projects have employed this failing model. More than a decade ago a Swiss philanthropist used $100,000 to hire marketing, administration and accounting professionals from San Jose to teach eager entrepreneurs on the Osa, including Guadalupe and surrounding communities, basic economic and business principles (Oviedo, 2014). When given the educational tools to prosper, the business success rate increased. By heavily investing in education and skill development, instead of financing the material needs of a startup and then disappearing like so many other development organizations, this philanthropist saw 12 of the 25 projects last to make a profit (Oviedo, 2014). The philanthropist also made a point of instilling social and environmental responsibility ethic in the training he facilitated. Merlyn was part of this program and Danta Corcovado Lodge is an example of its success. He maintains casual and business relationships with some of the other entrepreneurs in the program, a few of which were also childhood friends. Other successful businesses from the program include La Leona Lodge and Finca Köbó Chocolate Farm Tour, both of which will offer package deals with Danta Corcovado Lodge (Oviedo, 2014).

Many people in Guadalupe and surrounding communities have observed the success of tourism, specifically hospitality based businesses and have unwisely attempted to enter the already very competitive market themselves, often these people lack the English and computer skills crucial to participate in the global tourism industry (Oviedo, 2014). Merlyn explained that many business opportunities exist which do not require these skills and complement the lodging and tourism industry on the Osa Peninsula. For example, one of Merlyn’s main costs is food for guests, which he aims to buy in season and as locally as possible in order to keep money within the community. He buys much of the food in the nearby town of La Palma and whenever possible he will buy food from Guadalupe residents, often fruits and vegetables. He sources all of his chicken from a local chicken farmer who began small, but because of the economic development in the area has been able to expand his company - fortunately, he still sells all of his meat within the Osa Peninsula (Oviedo, 2014).

An increasingly important factor in the global tourism market, especially in Costa Rica, is the environment. What impact a given business has on the environment and what actions they take to minimize their impact and enhance or improve the surrounding ecosystem is beginning to play a large role in tourism. The Certification For Sustainable Tourism (CST), which includes environmental as well as cultural and socio-economic sustainability goals designed to benefit local communities, provides an evaluation and rating service for tourism businesses to market their efforts. Although, some people in the industry, including Merlyn, believe the certifications are inconsistent and inaccurate. Merlyn explains that since he established Danta Lodge, all the building and construction projects have been undertaken with a low impact goal and have minimized resource inputs. For instance 97% of the lodge is made of wood only from reforestation projects, that is, he has never cut a tree from the primary rainforest. Merlyn has never put a drop of chemicals on vegetation and makes a point to not feed the local birds and monkeys. Feeding birds and
monkeys is an ecologically harmful practice common at other eco-lodges and resorts, in an attempt to please guests who come to see wildlife. Merlyn has invested in two solar water heaters, enhancing his commitment to sustainable practices. Despite his efforts, he has only received three leaves from CST while large, energy intensive hotels in other parts of the country have received five (Oviedo, 2014). Merlyn attributes the certification’s inadequacy to those who control the program and the relationship between money, power and investments in various projects that lead to biased ratings.

While Merlyn received a valuable education in entrepreneurship for free, he started Danta Lodge with his father’s house, land, and a small amount of cash. He began to build his lodge out of the original house on site and three years into his business a local bank approached him to ask if he would be interested in taking out a loan. Having a basic understanding of how to grow a business Merlyn took out a loan and invested in a kitchen (Oviedo, 2014). Merlyn noted the importance of paying attention to the economies of the developed world as about 99% of his customers are international and many hail from rich countries. He has more customers from Europe than the United States and as a result experienced little repercussions from the economic crisis in the United States, but the European economic crisis has had much more of an impact on profit.

The Rainforest Alliance is organizing and funding an entrepreneurial mentor program that aims to tap into the knowledge and experience of successful local business owners (Oviedo, 2014). Merlyn and business owners who benefited from the Swiss philanthropist are involved in the program as mentors to help aspiring entrepreneurs realize their business potential through business education. The Rainforest Alliance aims to raise $1 million for this project. Merlyn has attended planning meetings in Puerto Jimenez where he has inquired how this large sum of money will be distributed and spent, though he has yet to receive a concrete answer. Merlyn was formerly part of a similar program called The Enterprise for Responsible Development Association (Asociación de Emprendedores para el Desarrollo Responsable, or ASEDER). ASEDER’s goal was to promote and execute sustainable production activities, using criteria for environmental quality, social benefit, and economic viability to train young leaders and entrepreneurs from rural communities (Oviedo, 2014). The project found decent success in its work but is no longer operating due to unspecified legality issues.

The nearby resort, Crocodile Bay Resort, in Puerto Jimenez is still being deliberated by government officials. Opposition to the resort fear it would have a devastating effect on local ecosystems, exclude locals from beaches they have visited for decades, and shift development patterns including the local tourism industry for the worse. The “worse” is a reference to issues involving more negative tourism products such as prostitution, excessive parties, and four wheeling or ATVs (Oviedo, 2014). However, Crocodile Bay would bring an upscale clientele, likely not making the “worse” any worse. The management is also currently battling land use regulations to fill in 1.6 hectares of ocean for further development, a project with grave ecological consequences. While many citizens from region believe Crocodile Bay would have minimal positive effects on the local economy, Crocodile Bay has responded by assuring locals employment, especially in the low season, and would in fact provide recreational access to local residents. The accuracy of these statements, however, is heavily questioned.
Social Capital

Social Capital is the lifeline and linking force between all of the capitals. Often in the wake of some catastrophic event, social capital is a major determinant of a community’s resilience. Both its internal and external social ties and the level of trust among them determine a community’s social capital. Bonding social capital is comprised of the trusting relationships community members have with one another. Bridging social capital consists of the connection between a community and people or organizations from external communities. To strengthen a community's bonding and bridging social capital, its members and organizations must work to develop and nurture tight-knit relationships with family, friends, neighbors, and acquaintances as well as individuals and groups from far away towns, regions, or countries.

A huge facilitator of bridging social capital, in Costa Rica and more specifically Guadalupe, is tourism. Tourists come to visit from a wide variety of places, attracted to the natural beauty that Costa Rica has to offer. Additionally, facilitators of bonding social capital would be entities that foster deep bonds between community members, for example, local schools or projects.

Below, are listed many more facilitators to bonding social capital and bridging social capital that the class learned of during their time in Guadalupe. These are organized from the strongest bonding facilitators to the strongest bridging facilitators.

The Guadalupe Primary School
Director: Grace Urbina
Teacher: Otilia Camache

Situated in the heart of Guadalupe, The Guadalupe Primary School educates students between the ages of five and twelve. The goal is to prepare them for future levels of education including high school, and possibly college or specialized trade schools. Every town in the Osa peninsula has at least one school, all with the intention of ensuring opportunities for future generations. Through promoting the development of social and academic skills, teachers and school staff provide a foundation for strong social capital within Guadalupe (Guevara, 2014).

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<td>The Guadalupe Elementary school is a huge catalyst for bonding social capital in the community as it fosters an environment where children are able to learn and play together almost every day. Sharing their childhoods with one another creates a bond that can last throughout their lives.</td>
<td>This elementary school education prepares and encourages the children of Guadalupe to attend high school and other levels of education in surrounding communities.</td>
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The Guadalupe Soccer Team
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<td>The Guadalupe soccer team consists of fourteen local men who are brought together every week by their passion for soccer. Members of the team also engage in informal pickup games throughout the week, which are valuable to community bonding in Guadalupe.</td>
<td>Every Sunday, in communities around the Osa peninsula, the Guadalupe soccer team takes part in small tournaments where community members have the opportunity to not only enjoy the tight knit and exciting atmosphere, but also support their economy. During these tournaments there is typically a barbeque, which also acts as a source of income for the host community (Largaespada S., 2014).</td>
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**Gold Extraction**

*Information from an informal interview with Rosalia Quesada, a local in Guadalupe*

Rosalia recalls her childhood, growing up with her father in Guadalupe. Rosalia began extracting gold with her father when she was 15. Now 43, Rosalia still goes back to extract gold whenever necessary with her now 83 year old father. Rosalia and her father have been extracting gold at a river on the Guaymi reserve, just outside Corcovado National Park. To get here, they walk together about three hours with all of their equipment and supplies. Rosalia and her father work in waist high water for anywhere between eight and fifteen days, extracting gold, until they have enough to sell, or they simply run out of supplies and must return to Guadalupe.

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<td>Out of roughly twenty people, Rosalia is the only woman in Guadalupe who extracts gold. The majorities of the men in the gold mining community take temporary, legal jobs in construction and security, and therefore extract gold only as a second source of income when it is necessary. For Rosalia however, this is her only source of income.</td>
<td>Miners can sell the gold to those outside of their community creating connections with other communities.</td>
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**Asociación Administradora de Agua (ASADA)**

ASADA was developed 20 years ago in an attempt to organize payments for water use and conserve the water system.

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<td>ASADA is slightly different than the other committees in that it is an association formed by 30 active members of an administrative board in Osa.</td>
<td>Currently, ASADA administers the water for Guadalupe and surrounding areas. In La Palma, the average price for water per month is around $6 USD (Rojas, 2014).</td>
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Asociación de Emprendedores para el Desarrollo Responsable (ASEDER)

ASEDER, also known as Asociación de Emprendedores para el Desarrollo Responsable (Entrepreneur Association for Responsible Development) was founded by José Rogelio Vargas in 2002, and was the first entrepreneur program in the Osa Peninsula. The organization developed from a network of hopeful business owners in search of entrepreneurial guidance. Of the 25 entrepreneurs that began ASEDER, twelve are now successful business owners (Oviedo, 2014).

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<td>The people of Guadalupe benefit from this network by gaining valuable business skills partnered with an environmentally sustainable outlook.</td>
<td>Once established, ASEDER became a legal organization. They were able to raise money and organize discussion groups to share business experiences and offer advice. Additionally, ASEDER held classes for aspiring entrepreneurs as a way of promoting development across communities.</td>
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La Palma

La Palma, although it is not an organization, association, or business establishment, is important to include because of its close proximity to Guadalupe. La Palma is one of Guadalupe’s neighboring towns, and is more urban than Guadalupe. The primary reason for the different degrees of development is because of how many people pass through La Palma when traveling to surrounding towns. Whether tourists may be headed to Guadalupe, La Playa Blanca, or Puerto Jimenez, all have to drive through La Palma. However, La Palma is not a tourist destination.

In La Palma there are roughly 2,000 people and two schools, a primary school (one year of kindergarten and six years of primary grades), as well as an academic high school (children attend for five years after primary school). Although every surrounding town has a small primary school, the school in La Palma is one of the largest and the best. As of March 2014, about 350 students from La Palma and surrounding towns attended the primary school (Gonzales, 2014). The eleven teachers at the school teach two classes a day, from about 7:00am to 12:00pm and 12:00pm to 5:00pm, with roughly 20 students per class. These teachers are expected to teach every basic subject for whatever ages they are assigned; a teacher may teach two different age groups. In the academic high school, children’s ages range from twelve to eighteen. The students attend school all day, five days a week from about 7:00am to 3:30pm. As of March 2014 there are roughly 400 students and 24 teachers. The teachers in the high school are specialized, and only teach one subject; there are usually two or three teachers per subject (Gonzales, 2014).

Many people also gravitate towards La Palma because of the increased work opportunities. La Palma provides jobs to several surrounding communities, especially in construction, supermarkets, and other stores. Community liaison, Shirley Largaespada, volunteers her time as secretary for the committee in La Palma. The committee consists of seven members; a president, vice president, secretary, and three other men and women (Largaespada S., 2014).
How does this relate to Bonding Capital?  
Similar to Guadalupe, the locals of La Palma are very close and friendly with one another.

How does this relate to Bridging Capital?  
Guadalupe and La Palma also have a strong connection. In La Palma, there is a small clinic for medical advice only, which people from the Guadalupe community often utilize. While Guadalupe also has one church, La Palma has five, for several different religions, which are often attended by members of surrounding communities.

Danta Corcovado Lodge  
Owner: Merlyn Oviedo Sánchez

In 1971, Juvenal Oviedo Sancho came to the Osa peninsula from Las Brujas (Escazú). At that time, land in Osa belonged to no one. It was a common understanding that if you developed it, you owned it. Juvenal established a farm growing rice, beans, and corn, as well as fields for grazing cattle; this is where he raised his family. Juvenal’s son, Merlyn Oviedo Sánchez, feels lucky to have been raised in Osa at a time when there were still no roads, or electricity. When he finished high school Merlyn did not attend university, but instead traveled to the United States where he lived for a few years learning a great deal about construction. Upon returning to the Osa Peninsula, consumed by his determination to start a project and do something that could positively impact the community, Merlyn approached his father about taking over the now run-down farm land. Not long after, Merlyn bought a pickup truck and some tools, and began building Danta Corcovado Lodge (Oviedo, 2014).

Today, Danta Lodge is still a local family business that Merlyn aspires will be the leader of eco-tourism in the Osa Peninsula, acting as a model for conservation, creative design, and sustainable development. The Danta Corcovado Lodge is run by an entirely local staff and built from 97% wood, all of which has been harvested in sustainable ways. Merlyn prides himself on never having cut a tree from the primary rainforest and has restored a majority of the natural ecosystem on his land. In the next five years, Merlyn’s vision for the lodge is to go to every space, to improve and update every detail, before building new (Oviedo, 2014).

How does this relate to Bonding Capital?  
Built on the desire to help the surrounding community, Merlyn and the staff at Danta Lodge began small projects, such as painting, or building desks for the local school. Now, they organize with leaders in the community to work on much larger projects, including the building of the community center.

How does this relate to Bridging Capital?  
Danta Lodge also supports external groups who wish to come and volunteer in the community. Merlyn makes the infrastructure open to any groups looking to do community service, regardless of whether they are staying at the lodge.
Morpho De Osa: Proyecto de Mariposas
Founder: Olga Chavarria

Directly translated to “Butterfly Project,” the Mariposario in Guadalupe is a developing butterfly garden and nursery. It is an organization that works for the empowerment and unity of women in the community. Because it is very difficult for women to find work in Guadalupe, the Butterfly Project aims to enhance their quality of life by providing opportunities for women. The second mission of the project is to promote conservation and entrepreneurship (Guevara, 2014).

As an organization, they export butterfly pupae. The process begins with the mixing of natural fertilizers for the plants. The women combine dirt, sand, and compost in plastic bags, which are then planted with various species of local flora specific to each type of butterfly. There are many types of symbiotic relationships between the butterflies and the plants. Morpho De Osa has several butterfly houses on its property. The first houses the plants from the time of germination; these plants need to be inside of the protective netting in order to avoid being eaten by other insects. The second greenhouse contains butterflies whose diet consists entirely of different tropical flowers. The third green house is a highly protected space for butterflies whose diet consists of fruits. The primary reason this space is protected is because this is where the pupas are collected for export.

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<td>Overall, Morpho De Osa is a destination for biologists, visitors, and tourists to enjoy. The employees have high hopes of impacting the conservation movements in Guadalupe while simultaneously increasing opportunities for women.</td>
<td>In 2012 Morpho De Osa received donations totaling over $23,000 USD from the United Nations Development Program for the materials needed to build their current space. This includes a small restaurant/eating area for community members and visitors.</td>
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Finca Köbö
Owner: Alexander Retana Mena

Finca Köbö is an organic farm known mainly for its production of cocoa and native fruits, also located on the Osa peninsula. This highly sustainable, eco tourism business is owned and operated by the very passionate and enthusiastic Alexander Retana Mena who also happens to be a very good childhood friend of Merlyn Oviedo. Alex was also one of the original members of ASEDER who is now a successful business owner. Finca Köbö is deeply invested in the education and perpetuation of sustainable agricultural practices. It is Alex’s dream for his farm to act as a model for conservation, where the environment coexists with all living things in a mutually beneficial relationship (Mena, 2014).

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Finca Köbö supports bonding capital by creating a relationship between the environment and surrounding communities, especially through the creation of jobs. Additionally, the close and trusting relationship between childhood friends Alex and Merlyn (Danta Corcovado Lodge owner) as well as other community leaders, is beneficial to all of their respective businesses.

Finca Köbö also supports bridging connections, as it is first and foremost an ecotourism attraction in the community.

**Guaymi Reserve**
Indigenous Leader: Mariano Marquinez Montezuma - Owner of Aguas Ricas Lodge

Today, the Guaymi are the only indigenous people living in the Osa Peninsula. Throughout southern Costa Rica, the Guaymi have five different tribes. The Guaymi reserve in Osa, is located on the border of Corcovado National Park and currently has a population of about 400 people. The territory of the indigenous village currently spans 3,000 hectares of enchanting rainforest and includes land for housing and a small primary school. Contrary to popular belief, the name *Guaymi* is a given name by non-indigenous Costa Rican’s; the name that the indigenous people actually call themselves is Ngöbe (Gonzales, 2014).

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<td>The relationship between Guadalupe and the Guaymi Reserve is close, and quiet. They have neighboring farms and often share resources. Additionally, some Guaymi children attend the Guadalupe primary school.</td>
<td>According to some of the local guides, the Guaymi Reserve is also one of the most popular tours for foreigners visiting the Osa Peninsula.</td>
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**Parque Nacional Corcovado (Corcovado National Park)**

Located in the Osa Peninsula, Corcovado National Park is the largest National Park in all of Costa Rica, spanning across an area of 424 square kilometers (164 square miles). It protects about a third of the southwestern peninsula and has been given extraordinary titles including, “the most biologically intense place on earth in terms of biodiversity” (National Geographic). From an informal interview with the elders of the Guadalupe community, the class learned that many locals were displaced as a result of making Corcovado a legal national park; in turn they resented its initial establishment (Historical Beginnings, 2013). Today however, the creation of Corcovado National Park is seen as a blessing in disguise. If it were not for the strict preservation of the rich and fertile lands, it would be unlikely that anyone would be able to operate business or raise their families in the area.

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Corcovado acts as a symbol of preservation and conservation which today has a strong presence in the community of Guadalupe. The connection to nature the people of Guadalupe have is astounding, and still growing. Knowledge of their natural environment is passed down through generations and deeply knit into their bonding social capital (trusting, tight, and close-knit ties).

Many livelihoods in Guadalupe depend on the tourists that are drawn to Corcovado National Park. Jobs in the tourist industry are springing up left and right; some jobs include becoming a certified tour guide, a worker at an eco-lodge, etc. All of which promote bridging between residents in Osa and foreign visitors.

**Instituto Nacional de Aprendizaje (INA)**

INA or Instituto Nacional de Aprendizaje (National Institution of Learning) is an organization with locations all over Costa Rica, which seeks to promote and develop the skills and training of men and women across the country. The goal of INA is to empower Costa Rican citizens and boost economic development by providing a foundation for employment. INA does so by providing free vocational training, where upon completion graduates of a course are given a certification in the specific field (Gonzales, 2014). Courses are offered in almost any field; examples include computer tech., cooking, tourism, bartending, and mechanics, upon many more (Guzmán, 2014). Courses can last between several days to a year depending on what is being studied. Throughout the year, some of the nation wide government taxes citizens pay go to INA, which allows the organization to ensure “free” education services (Largaespada P., 2014).

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<td>INA encourages productive work in all sectors of the economy, building community relations and partnerships. In doing so, they empower people to improve their lifestyles.</td>
<td>Although INA has several offices around Costa Rica, the organization also travels to rural areas, bringing courses to rural communities.</td>
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**Palma Tica**

Palma Tica is a large African Palm Oil plantation located in La Palma on the Osa Peninsula. It employs more than 70 people, 6 of which are from Guadalupe. Workers from Guadalupe often ride bikes or walk to La Palma, where there is a government-funded bus to take them to the plantation. The workers have long, strenuous workdays and on average workers make about $2 USD an hour (Guzmán, 2014). Unfortunately, workers generally have fewer opportunities for education because of the demanding hours. During a typical day, workers cut down leaves of the palms with cranes and harvest the seeds for oil. On a highly productive day, the plantation harvests 15,000 kilos of seed.

Currently, there is a roundtable group focused on the cultivation of sustainable Palm Oil in the area. It’s an organization consisting of International Multi Stakeholders that have worked to develop a certification scheme for sustainable palm oil (Guevara, 2014). As seen in examples including South East Asia and Africa, the regulation of agricultural practices for palm oil is extremely important. That is, if palm oil farmers do not take careful measures, their actions could have devastating environmental impacts.
### University of Vermont

For several years now, a group of extremely lucky UVM students have had the opportunity to participate in a spring break service-learning trip to the community of Guadalupe. Each year, the student’s stay at the wonderful Danta Corcovado Lodge and throughout the week, seek to uncover and document the framework of the community.

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<td>Students from UVM participate in a highly reciprocal service learning, while they integrate themselves into the community. Through the stories the class uncovers and the moments that are created, the hope is that UVMs impact encourages bonding relationships within Guadalupe.</td>
<td>The relationship between UVM and Guadalupe is an example of bridging capital. David E. Kestenbaum and Walter F. Kuentzel, instructors for the service-learning course, have fostered this relationship over the years.</td>
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### Fundación Neotrópico

Fundación Neotrópico is an organization that initially sought to provide volunteer opportunities to many tourists, as well as encourage many locals from the Osa Peninsula to work in tourism. The main office and the director of Fundación Neotrópico are in San Jose and they have an extension in the Osa Peninsula where there is a field station and lodge. Unfortunately, more than one community member revealed that although the organization used to be popular, quality of groups and experiences are now declining. Some community members expressed annoyance that the foundation does not have to work for the money they receive from tourists, donations, and volunteers. Instead, the money seems to be effortlessly handed over, and pocketed by the foundation (Anonymous, 2014).

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<td>Initially, Fundación Neotrópico was productive in promoting bonding within Osa communities, bringing people together and creating jobs through tourism.</td>
<td>Fundación Neotrópico provides lodging and meals for tourists seeking a community service experience. Unfortunately this has a negative impact on bridging capital for communities such as Guadalupe, because it deters business away from the local lodges.</td>
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The United Nations

The United Nations is primarily linked to Guadalupe through the funding of certain organizations and tourism businesses that they have supported in the past. For example, in 2012 the United Nations Development Program funded the startup of Morpho De Osa by contributing donations that totaled over $23,000 USD.

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<td>Their involvement with Morpho De Osa has empowered many women and created opportunities to do fulfilling work. Their influence has allowed for very close, trusting relationships to form amongst women living in Guadalupe.</td>
<td>This relationship between the United Nations and Guadalupe is overall a bridging relationship. It is an example of the ways that external, foreign organizations can promote development in a sustainable way.</td>
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Spectrum of Facilitators

Conclusion

As shown above, the community of Guadalupe has a very firm foundation of social capital that includes various important networks functioning both within the community and outside of it. Danta Corcovado Lodge and Morpho De Osa are two clear examples of how Guadalupe’s strong social capital enhances and adds value to the quality of life for individuals living in this beautiful community. Both businesses have created jobs and acted as figures of positive development for Guadalupe community members both young and old. The Danta Corcovado Lodge and Morpho De Osa signify the beauty that comes from creatively utilizing the assets in one’s community.
Conclusion

To successfully understand whether or not the class has achieved the objectives of the course, it is crucial that reflection upon the course objectives takes place. The first goal was to become “mindful” travelers as guests in a rural Costa Rican community. Based off the student’s interactions, coupled with the feedback the class received from various community members and instructors, it appears this objective has been achieved. Proof also lies in the class’s ability to successfully use cross-cultural communication, both in bilingual interactions and exploration of other cultures through the lens of student’s own culture. Second, the class feels that they have proven their academic understanding of rapid rural appraisal and appropriately applied it to the fieldwork that occurred in Guadalupe. After field interviews the class was able to accurately evaluate the possibility of development of rural areas. Last, the students effectively challenged the way they addressed the communities during the visit, particularly the community of Guadalupe, in a way that will forever change how students will approach future communities.

Using rapid rural appraisal and participatory appraisal the class was able to accurately approach and analyze each of the seven capitals. Students learned that key community members, including the community liaisons, step up in the absence of a true government and work to constantly improve the village’s quality of life. This provides the community with a solid foundation to increase their political capital. Although Guadalupe is a relatively new community, spanning only three generations, it has been observed that there is a diverse skill set among the community members, allowing for strong capital.

In regards to the seven capitals framework, the class was able to conclude several things. As the community was only formally established ten years ago, built development still has a long way to go, but the current infrastructure supports a town on the rise. The class recognized that due to Guadalupe’s location in the Osa Peninsula, close to Corcovado National Park, the town is full of natural capital and community members who are dedicated to sustainability. The community of Guadalupe has a very firm foundation in social capital that includes important networks functioning both within the community and outside of it. By focusing on specific customs like folklore, machismo, religion and Guaymi indigenous group, students uncovered strong cultural capital within the community. Financial capital can be quantified as poverty rates, new business development, economic income, and conditions of infrastructure, which Guadalupe is reinforcing steadily.

Overall, in Guadalupe, some capitals present themselves in stronger ways than others; including cultural, social, human, and natural capitals. Other capitals however are still gaining momentum and establishing a greater presence in the community. Nonetheless, promising future development is making way for all of the capitals in Guadalupe; it is the combination of all seven capitals that balances a community.
Our recommendations and advice for future classes

As a class, we felt we would have been better prepared if we had placed more emphasis on the document from the previous year (2013) before landing on the ground in Costa Rica. Although this was an expectation, we unfortunately did not give it as much weight as it deserved until we were in action. Doing so would have helped us to establish a better foundation for where to begin our data collection, allowing for better time efficiency.

We would have loved to establish communication with the community liaisons and community leaders prior to our arrival to aid us in the transition process, enabling us to really hit the ground running once we arrived.

Additionally, upon return, reality set in very fast about what it would take to complete a polished document. After now having gone through the editing process, we have produced a document we are proud to put our names on. Nonetheless, it is clear that there is still more to be done. It is not easy to write a document with fifteen other people and make it coherent. We suggest future groups establish some guidelines before any writing begins. One suggestion would be to collectively outline an introduction to the document, providing everyone with a foundation for where to begin their writing (this will avoid every section beginning with a description of the course and of Guadalupe). Students should also outline what should be in every section, to avoid overlap.

Other things to discuss include; citation formats, what tense to use, referring to the class as opposed to us in the writing, avoiding contractions, spelling out numbers, ensuring every group has an introduction and conclusion to their capital, and everyone knows how to spell the names of the community liaisons and places visited. Although it may sound tedious or nitty-gritty, it will pay off in the end.
References


Lena B. M. Vought, Jonas Dahl, Carsten Lauge Pedersen and Jean O. Lacoursière (1994)
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Additional Web Pages


Personal Communication

Elizabeth Guevara, March 2014
Walter Guzmán, March 2014
Shirley Largaespada, March 2014
Pablo Largaespada, March 2014
Merlyn Oviedo, March 2014
Alexander Retana Mena, March 2014
Nelson Rojas, March 2014
Mariano Marquinez Montezuma, March 2014
Andrey Gonzales, March 2014
Jairo Tijerino, March 2014