### **Semillas Sostenibles (Sustainable Seeds)**

Etla, Oaxaca, México University of North Carolina at Chapel Hill Maya Weinberg, USA, UNC-Chapel Hill (Team Leader) Paulina Covarrubias Álvarez, México, University of the Americas (Team Member)

### Two-sentence summary of the goals of your project

The goal of Semillas Sostenibles is to contribute to efforts assisting small-scale farmers to adapt to climate change and market competition through creating a seed bank that makes diverse seeds, specifically amaranth, more accessible. The bank serves farmers in the Central Valleys of Oaxaca, Mexico by creating a meeting space for discussion and knowledge-sharing on how to make farming economically viable while providing farmers with seeds that yield higher market prices and are more weather resilient.

### Did other fund-raising efforts contribute to your project? What were they?

We received a small grant from Dreamers Who Do, a fund from the University of North Carolina at Chapel Hill that assists students pursuing entrepreneurial projects. The funds were used to offset our cost of living so that more of the Davis grant could be used to fund our project.

# How did you come up with the idea for your project? Why do you think the issue your project is responding to exists?

Paulina and I spent the previous summer in the Central Valleys of Oaxaca engaging in research through interviews, meetings, attending conferences and working crops harvests to get a better understanding of how globalization and climate change are affecting the community fabric and economics in the region. We made two key observations: First, that climate change is one of the primary factors in children of farmers pursing work outside of the community; and second, that farming is becoming increasingly unprofitable as mini-markets with processed, imported food are replacing local cuisine and production. For several farmers that we interviewed, there was a fear (in some cases realized) that children were being recruited by narco-traffickers to participate in poppy production. In other cases, there were remarks on illicit activities by youth as a result of a lack of economic opportunities. After connecting with Puente a la Salud Comunitaria, an organization that promotes food sovereignty in the region, we collectively decided to create a network of farmers that could share seeds for more profitable crops, as well as provide an access point to seeds that are more resilient to climate change. This idea came to fruition with the proposal of a seed bank that would serve as a space for discussion among farmers, both young and old, about how to address their increasing challenges of the dropping prices of crops as well as the growing change in weather patterns affecting their harvest. The bank provides seeds for amaranth, an endemic, weather resilient crop that yields a relatively higher market value than other local produce. The bank also collects seeds of endangered corn varieties that are gaining popularity in urban centers, such as the capital of Oaxaca, as well as overseas — thereby providing higher market value for the farmers.

#### Why did you choose your host site to work in?

The Central Valleys of Oaxaca was our chosen site in part because it was a region where we had worked in the previous summer and fall, and we therefore felt relatively more comfortable promoting a project there. Our community partner was located in the Central Valleys and had significant rapport that we hoped to draw on through the seed bank. Furthermore, the Central Valleys in particular have experienced significant negative effects of globalization, both through dramatic changes in weather patterns (as most farmers depend on seasonal rains), and through the trend of imported foodstuffs

replacing local production, due in part to their connectedness to the city through highways and public transportation.

# What was it like to work in your host site? Did you feel at any point that the project was not going to work? In what ways?

The first few weeks at our host site were quite challenging. Despite having gotten to know much of the staff of Puente through our research the previous summer, we arrived to find out that all of the staff we had worked with had been replaced in the past month. We also found out that there had been little communication between the organization's director, whom we had been in contact with, and the staff that were meant to be working on the project. Therefore, our first week on the project was spent orienting ourselves within the office, as well as building support from the new staff. We were also tasked with administrative activities not necessarily related to our project, which we pursued as a manner of gaining greater support for our own project. It was during these days that we were unsure if we would have enough time to make meaningful headway on the seed bank. Our first strategy to address the lack of staff support for our project was to attend compost workshops that the office conducted throughout the summer in order to speak with farmers about their ideas for the seed bank, including its structure, governing body and utility. After several conversations with the director of Puente, and meetings with the rest of the office, during week three we were finally able to begin speeding up the steps of our project.

Once we got started, the rest of the staff quickly became invested in the project and offered to help in whatever capacity their positions allowed. As many of the staff were new, it was an exciting environment in which to learn, grow and adapt to challenges and setbacks alongside the rest of the team. One such challenge was addressing the sustainability of the project in the long term. Towards the end of the summer, we acknowledged that there were some steps of the project that we would not be able to complete ourselves, such as checking the fertility of the seeds we had collected and running the bank. Therefore, we decided to set up a fellowship program for two students from a local university to make sure the seed bank runs smoothly during its first open season. We created an application, outlined responsibilities and reached out to local universities to attract applicants. Through this means of structuring longevity, we were able to encourage local involvement in the project, as well as ensure that the seed bank would receive the support it needs from committed individuals.

### What were the challenges you encountered in communicating with people?

While Paulina and I both speak Spanish, we did encounter several challenges in regards to communicating the urgency of getting the project started early in the summer. Our timeline was ambitious, as we planned to conduct extensive interviews with producers to understand how to construct a long-term committee to run the seed bank after we left, collect and organize seeds for distribution, manage the budget for related costs, set up a structure for seed dispersal, create a format for publicizing information about the bank and do educational outreach with high school students on the value of amaranth. We encountered some additional challenges while trying to conduct interviews with producers. Because seeds have been a strong part of the identity of producers in the Central Valleys, we occasionally encountered protectiveness around sharing ideas about the creation of the seed bank. However, we were almost always able to overcome this by explaining that the initiative would be run by and for producers, using their input, and that our interviews were an effort to set up the structure under which they would control how the bank works.

### How do you define peace?

While both Paulina and I have invested significant effort in understanding peace through our academic studies and previous volunteering and internship experience, the opportunity to design and

implement our own initiative allowed us to restructure our understanding of the concept. We have come to understand peace as a slow-moving and profound process. Creating viable economic opportunities for young people is one of the most sustainable ways to create a peaceful society. In Mexico, specifically, the lack of job opportunities motivates many young people to take measures to provide for themselves and their families. For many, this has meant taking part in illicit activities such as narco-trafficking and joining gangs.

We look at these decisions by young people not through a lens of judgment, but we instead have had the opportunity to understand the 'how' and 'why.' Throughout Mexico and Central America (as well as many other regions throughout the world, including the United States), localized violence and lack of safety can often be attributed to young people turning to acts of desperation when "normal" avenues for gaining income are not attainable.

Looking at peace through an economic framework, we have also had the opportunity to reflect on how the United States has its own challenges in maintaining widespread peace. In hot spots like former coal country in Appalachia and inner-city communities, lack of economic opportunity, starting with unequal distribution of the quality of education, continues to affect people's life outcomes. Several parallels can be drawn to countries that are more commonly understood to lack peace.

Our work with Puente a la Salud Comunitaria has helped to demystify the lofty and perceived-impossible goal of peace. While our initiative is a very small and slow-moving step towards providing more economic opportunities for young people, it has certainly shed light on how we can approach peace-building strategies in our own careers moving forward.

#### How does or will your project contribute to peace? Short-term? Long-term?

The goal of our project is to contribute to peace in a slow and meaningful way. We do not expect an immediate large-scale change to take place as a result of this project; rather, we hope it provides a sustainable economic framework, rooted in community tradition while addressing the present-day challenges of a changing market and climate. During our time in Oaxaca, we met with several young farmers who are continually challenged by the lack of infrastructure set up for new farmers. This includes the need to access knowledge as well as seeds in order to be profitable. As most young people in the region of Etla, Oaxaca seek opportunities to leave their community or obtain new ways of providing for themselves and their families, illicit means of earning this income can become enticing.

We designed our seed bank to create viable long-term economic alternatives for young people. The seed bank provides comprehensive tools that enhance young people's ability to enter or stay in a sector that has become less viable and less attractive. Over time, as the bank gains recognition among farmers, both new and seasoned, we hope it will help facilitate a more stable local economy.

Has your project changed the way you think about the world? How has it changed you? Please provide a 1-2 personal statement sentence, suitable for use as a quotation, addressing how and why this project was valuable and what was the most important thing you learned as a result. Indicate the student's name (yours or your teammate's) for quote attribution.

The summer we spent implementing our project created an educational opportunity to gain insight into how rural development works overseas. It led us to reconsider who we view as experts. The struggles, successes and collaborations of our project often put us in the position of students, learning from farmers and local advocates about strategies that we hope to highlight in our continued study and practice of rural development.

Maya Weinberg and Paulina Covarrubias Álvarez

## **Photos**



Paulina and Maya harvest amaranth for the seed bank.



Puente a la Salud Comunitaria employees, Esaú and Liz, along with Maya and Paulina at the seed bank counter display.



Paulina watering experimental/ educational garden with Puente a la Salud Comunitaria employee, Camilo.