Melissa Summers

Agricultural Production Team

Summary of what we were asked to do:

Initial discussions with members of Asociacion Mangle's agricultural team, indicated their necessity for a better understanding of the current agricultural production capacity and growth potential for the Bajo Lempa area. In order to facilitate the attainment of this information, Equipo Monterey's production team was asked to develop a reliable and replicable survey tool. Concurrently, the production team of Equipo Monterey was tasked with observing current levels of agricultural production, diversification, and sustainability. These observations were to be used in developing recommendations to promote growth in these areas, leading to increased "food sovereignty" and more sustainable agricultural practices for the Bajo Lempa region.

Methodology: Why we did it? How we did it?

- To obtain information from a given community, we decided it was most efficient to create a survey which would include a mixed methods approach. Qualitative and quantitative measurements were incorporated into the tool in order to assess the progress and patterns of agricultural practices in the Bajo Lempa.
- Initially, we outlined general information that we hoped to obtain from the surveys. Identifying topics such as demographics, distribution, production, and consumption, we developed specific questions designed to ascertain relevant indicators. The survey was further refined to ensure the language and breadth of questions would be applicable to the entire population of the Bajo Lempa, and accurately represent the varying conditions and capacities of different communities.
- Following construction of the survey, we administered three pilot tests in local communities in order to ensure proper translation, appropriate question sequence, and that all necessary information was obtained.
- In order to increase our understanding of current agricultural practices and enhance our abilities as surveyors we felt it was important to visit local farms and vegetable gardens. These visits were very informative and provided greater insight into the agricultural production indicators we were attempting to capture.
- Using Google forms we constructed a survey which can be easily accessed for data input and produce rapid visual representations of the data.
- In order to facilitate Asosacion Mangle's use of the survey tool, we provided a tutorial explaining considerations to take into account when developing surveys including random sampling, question construction, and best practices. In addition we demonstrated how to access, alter, and create Google surveys. Finally we demonstrated how to input data and access survey results summaries.

Location of where the work was done:

- Due to the necessity of internet access the survey construction was conducted at La Coordinadora's community center in Ciudad Romero.
- Pilot testing of the survey was conducted in Isla Mendez, and the communities of El Cedro, and Limonera.
- Field studies of farms were performed in Ciudad Romero and Limonera.
- Field studies of vegetable gardens were performed in Isla Mendez.

Observations:

- It is possible to use a survey tool to accomplish Mangle's objectives. However, it is important to realize that due to logistcal, economic, and time constraints the surveys can only be administered to a sample population within a given community.
- Financial restraint and weather have been the main causes of hardship in local agricultural communities, but the will to increase and diversify production does exist.
- Capacity and potential for our recommendations are already present and are progressing within certain households of Isla Mendez. This capacity is also burgeoning in other communities. Much of the food produced in the vegetable gardens of Isla Mendez is strongly desired by the other communities where they must currently rely on picacheros, stores, or markets. The prices of these products, most recently beans, fluctuate without warning, and the local communities have no other options but to pay these prices.
- During our field studies of the vegetable gardens, we discovered that two farmers in Ciudad Romero and Isla de Mendez have been experimenting with a particular bean typically grown in the highlands. These two farmers appear to have successfully produced this bean given the climate conditions of the Bajo Lempa.

Next Steps:

- Finish and finalize the survey to encompass all of the information and indicators Asociacion Mangle hopes to obtain with the tool.
- Conduct the sur
- vey in the desired communities of the Bajo Lempa to obtain baseline data about current conditions, practices and capacities.
- Enter the data obtained from the survey to create a database of information for each individual community where the survey was conducted.
- Use the information in the database together with community meetings to determine the specific agricultural production needs and desires of the community, and identify qualified and suitable candidates for program participation.

- The survey tool will provide the means for identifying and monitoring indicators of sustainable agricultural practices, such as: increased production, increased diversification, increased use of organic rather than chemical inputs, increased enrollment in Agricultural School and interest in Mangle programs, and increased financial resources due to income generation and/or decreased spending on food products.

Summary of Recommendations:

In order to address Asociacion Mangle ultimate goals of helping communities to establish food sovereignty and sustainable production methods, we have identified two primary controllable problems in the current capacities. These two problems are: lack of financial resources and lack of general agricultural knowledge. However, Asociacion Mangle has made great strides in addressing these two issues. Through its Green Credit program and its creation of the School of Agriculture it has laid the framework for increased access to financial resources and the dissemination of knowledge.

We recommend that Mangle continue its current practices of providing financial resources and training with the goal of helping individual households to establish their own gardens in different communities. In conjunction with the model based on individual households we recommend the development of a learning cooperative similar to the one in Ciudad Romero where sustainable agricultural practices could be more widely disseminated.

Once individuals start producing on a larger scale and establishing a surplus of goods, opportunities will arise for the sale of their harvests. To provide distribution channels, we recommend the development of a partnership program. This program's goal will be to create a networking system which will connect local producers and local distributors. Distributors could be community members with means of transportation who are known and trusted by the producer or Mangle. These partnerships will facilitate the local supply chain needed for the creation of a local market. The establishment of a local market will help to keep money within the community and naturally incentivize diversification, specialization, and increased production.