Report on the Anapati Pangoa Mission Project

October 2015

Introduction

I want to apologize for not sending a report in 2014. I don't know why I overlooked it. I will cover both 2014 and 2015 with this report

Since the last report on the farm project in December 2013, changes have occurred both good and bad. We again had problems with a farm manager that replaced the original farm manager, and as a result additional changes were made. A different management strategy was implemented. The condition of the farm project has improved significantly with production of cacao expected to begin in December 2015 or January 2016. The production should continue to increase over the next two to four years.

Farm Project and Management Changes

The original farm project manager, Abraham Campos was dismissed in December 2013, and in March 2014 was replaced by Luis Lermo. During the transition period as part of the separation agreement with Abraham Campos, the 10,000 cacao plants were transplanted from the greenhouse to their final place in the field. Luis Lermo took over with the farm in fair condition with the plants in the ground. The undergrowth was still not well controlled, but was not exceptionally high.

New plants in the ground in April 2014.

In addition to the new plants, an area of older cacao left by the previous owner had been cleaned up and restored. This area was measured with GPS and found to be approximately 1.6 hectares in size adding approximately 1600 plants to those that had been planted. These older plants were not the best species, and plans were made to graph them with the CNN51 species along with the new plants.

Area of older cacao left by previous owner

From Arthur's visit in April 2014 to August 2014 regular reporting by Luis Lermo indicated that the farm was progressing. In May, the greenhouses were replanted to have plants to replace those that did not survive the original transplanting. Clearing and control of undergrowth had

Preparing new plants in greenhouse.

been accomplished on the lower part of the planted area, but undergrowth was out of control on the upper part.

Undergrowth cleared and controlled on lower part of planted area.

Uncontrolled growth of brush on upper part of planted area.

In July 2014, grafting of some of the cacao plants was accomplished. It was reported that approximately 5000 plants had been grafted with grafts from the preferred CNN51 species.

Grafted plant.

Unfortunately it appeared that control of the undergrowth was falling behind with some of the previously controlled areas exhibiting moderately high growth.

Undergrowth in previously controlled areas approximately half the cacao plant height.

In August 2014, the plants in the greenhouse were doing well and ready for transplanting. Unfortunately, the undergrowth appeared to be out of control. Luis was questioned about this, as it appeared he was not employing enough workers to maintain the area. He indicated that he had two workers, one of whom was his wife. When asked why he did not have more, he indicated that it was hard to get people to come work.

Greenhouse plants ready for transplanting.

Uncontrolled undergrowth with clearing only around individual cacao plants.

In early September 2014, it was more apparent than ever that the maintenance of the farm was not adequate. Another discussion was held with Luis Lermo about this. He indicated that the one worker he had was fired for not fulfilling his contract and had not been replaced.

Undergrowth overtaking cacao plants.

In October 2014 Luis Lermo failed to provide a progress report. Reports were requested frequently through the end of the year. The reports on the physical condition and financial reports were finally turned in on January 2015. These reports were inadequate at best, and after close analysis of both reports it became evident that Luis Lermo had abandoned the project most probably in late September 2014. Luis Lermo was dismissed as the project manager in January of 2015. He has subsequently disappeared and has refused to meet with us to settle the final accounts.

After much prayer and deliberation, the directors of the Fraternidad Misionera decided to change the management structure of the farm. It was decided to have an independent consultant evaluate the present condition of the farm and to provide quarterly evaluations thereafter. A manager would be hired to oversee the work on the farm and fulfill any directions given by the consultant. The farm manager was responsible for hiring workers and making purchases for the farm. The farm workers were to keep a daily diary, and the farm manger would make bimonthly reports on the progress.

After prayerful consideration in February 2015, the job of farm manager was offered to Jorge Ayala. Jorge is the leader of our missionary team in the Anapati region. One concern was whether Jorge could manage both responsibilities. Jorge felt that he could, so we agreed to try.

Jorge is also not taking any salary for the job as farm manager, choosing instead to use only the missionary support that he had previously been receiving.

Working with Jorge, we selected David Goya as our consultant. David is the owner of a successful cacao farm, and had come to know Christ through the ministry of our national missionary team in the Anapati region. David has managed his own farm successfully for many years and agreed to accept our offer. He travels up the Anapati river from Puerto Anapati to inspect the farm at least once a quarter, or more often if Jorge feels his direction is needed. David is paid a small fee of S/.150.00 nuevos soles plus his trip expenses each time he visits the farm.

Through his contacts Jorge located a family that has had considerable farming experience in northern Peru, Lúcio Pérez and his wife Marita. They agreed to move to the farm and take on the work. They are accompanied by their daughters, Marcela and Luciana. Two of our national missionaries were employed temporarily to help with the cleanup and control of the overgrown brush, Jackson Pérez, Lucio's brother, and Julio Cesar.

Current farm team as of August 2015 left to right: Jorge, Jennifer, Moises, Marita, Marcela, Luciana, Lucio, Jorge and David.

In April 2015, substantial progress had been made to control brush and clean the farm area. An inspection was made by David Goya to determine the status of the cacao. He reported that approximately 600 of the plants on the upper section had not survived and would need to be

replanted. Of the 5000 plants that were grafted only approximately 3000 of the grafts had survived. The 2000 grafts that did not survive along with the remaining plants would still need to be grafted before they would be expected to produce. The cacao left by the previous owner that had been reclaimed, had been totally retaken by the jungle.

General condition of the farm in April 2015.

In May 2015, under the direction of David Goya, the greenhouse was reestablished to provide replacements for the failed plants. Clearing and control of undergrowth continued. Additional heavy duty weed eaters were purchased for the clearing and ongoing maintenance. By August 2015 the clearing and restoration was complete, and the failed trees had been replaced. Grafting was scheduled for September 2015, but due to drier than normal weather, was postponed until November 2015, in hope that early rains would create a better chance of survival for the grafts.

The previously grafted plants are recovering from the lack of maintenance and are growing well. These plants are expected to start producing in December 2015 or January 2016. If grafting can be done in November 2015, as desired, the additional plants should start producing by the end of 2016 or the first quarter of 2017. Minimum production is expected to be approximately 50 kilograms per hectare every 15 days in the beginning and increasing to 150 kilograms per hectare every 15 days as the plants mature. It is estimated that we have recovered to approximately 75% of where we should have been at this time.

Previously grafted plants recovering.

Farm looking north.

Property Line

As a result of some of the work done in April 2014, we discovered that a difference exists between the plat and the property line on the ground. We held several discussions with the neighbor that would be affected by this difference and others from the area. All of them insisted on more than one occasion that the property line on the ground was correct, and that the plat was wrong. The affected neighbor is Jorge Ore, and the property line in question is the western line.

In August 2015, we were able to perform a GPS survey of the property lines. Although GPS measurements are not sufficiently accurate for surveying property lines, they are sufficiently adequate to show the issue is valid. With the data from the GPS survey, we calculated that the farm property has approximately 10 hectares more land than is shown on the plat. With this data, we will apply for a plat revision. This process will probably take a long time, but is worth the effort.

The property line is marked with tree stumps. Even though we had to cut through significant underbrush to locate them, we were able to locate many of these markers. We were accompanied by one of the long-time residents of this area, Grimaldo, who knows these line and other things, as well.

Typical property line marker.

As we performed the survey, we encountered a Shushupe or Bushmaster, one of the most venomous snakes in the Amazon. This snake was approximately 2 meters long and not only has fangs, but it has a venomous barb on the end of its tail. This snake acts somewhat like a cobra, and its venom is reported to attack the nervous system and the circulatory system.

Shushupe or Bushmaster.

Farm House

The farm house was never in very good condition. The original construction was poorly done, and it had deteriorated from that point. The roof leaked substantially when it rained, and the structure was unstable, swaying when people walked on the floor and when the wind blew.


Original farm house construction.

In August 2015, Moises and Arthur added braces to the structure to stabilize it. They took measurements for designing repairs for the structure. Plans were also made to add a separate kitchen and dining area. Lúcio was left with a list of lumber that would be needed for the repairs and construction.

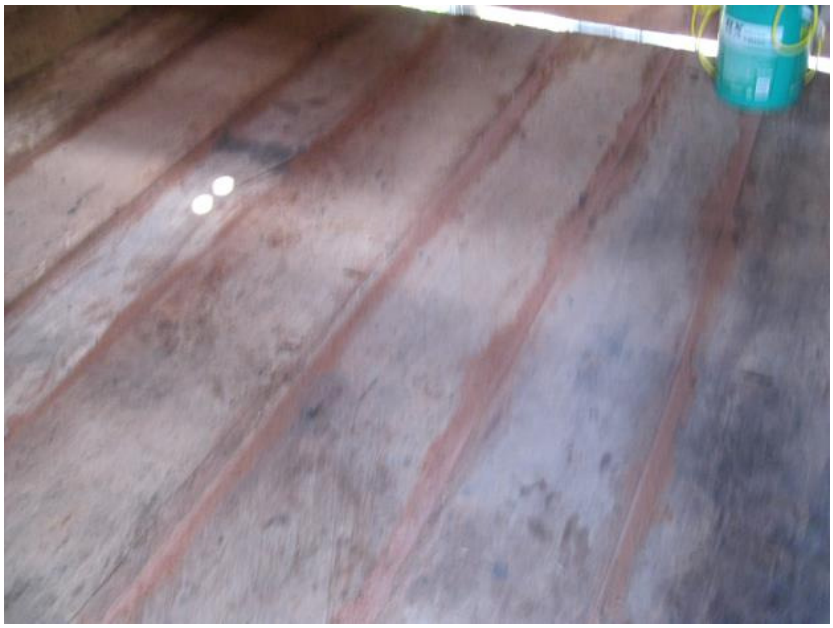
Arthur and Moises adding braces to structure.

In mid-September Moises and Jorge returned to the farm with supplies and materials for repairs. Lúcio had cut the lumber from trees on the farm. The roof and roof structure were replaced. The kitchen and dining area were constructed. The roof over the dining area was made using materials recycled from the old house roof. A new stairway was constructed to access both the kitchen and house. The floor boards in two rooms were sealed. Sealing of the remaining floor boards remains to be done, and the repair of the exterior walls is still pending.


House with new roof.

New kitchen and dining area with new cookfire table and water barrel.

New stairs for dining area and house.



Sealed floor board in house.

Cacao Dryer

Design and development of a passive solar dryer to dry cacao is almost complete. Design of some interior baffles to control airflow and stops for the drawers remains for the prototype. Optimization of the design for future dryer construction is in process as well. Once the prototype is complete and design optimization is done, the prototype will be disassembled and sent to the farm where it will be reassembled for use.

Prototype of solar cacao dryer.

These dryers will be important when the harvest starts. One dryer can dry approximately 500 kilograms of wet cacao beans at one time. The prototype dryer should be sufficient for the beginning harvest, but we will ultimately need 6 to 8 more dryers when the plants are in full production.

Once harvested the cacao beans need to be fermented for approximately 5 to 7 days and then dried for 3 to 7 days to prepare them for market. We will need to construct wooden boxes for the fermentation process, also, but this is relatively straight forward.

Road

The road conditions have improved somewhat. Work is being done on the road by the state. The road surface had been graded, and some of the bridges repaired. The trip time from Pangoa has been reduced from approximately 8 to 9 hours down to 5 hours. A lot remains to be done. Access to the farm by four-wheel drive vehicle is much better. The road surface still has not been well stabilized and may not survive the rainy season in good condition.

Access to the river across a portion of the property was requested for the purpose of mining stone from the river for stabilizing the road surface in our area. We granted this access as it is not only favorable to us from the road standpoint, but gives us a good access to the river for our own purposes as well. Work to stabilize the road between Libertad de Anapati and the farm, approximately 12 miles, is supposed to start in the very near future.

We still have access to the farm by river during the rainy season using a small boat and traveling up river from Puerto Anapati, where the Apanati River joins the Ene River. We can also take products to market this way as well.

Electricity and Water

There is a stream that flows through the property that is currently used for all water needs: drinking, washing and bathing. The stream is located approximately 45 meters from the house and is accessed by a path. Water for use at the house has to be carried from the stream.

A GPS survey of the stream aligned very well horizontally with the stream location as shown on the plats. The vertical drop in the stream is so flat that GPS data was of little use. It is estimated that the stream slope is less than 0.03%. A cross section of the stream was taken using a water level to the house location. The dirt floor of the house is approximately 4.2 meters above the stream bed. The stream is fed by ground water as evidenced by the base flow present during the dry season. During the rainy season the stream runs approximately 0.7 meters deep routinely, with monthly flood levels of approximately 2.4 meters deep.

Initial evaluation of the stream for purposes of generating electricity indicated that it would not be viable. The extreme differences in flow and water elevation and the low flow rates in the dry season would make control of the water difficult and expensive for this purpose. It might be possible to construct an intake structure for the purposes of collecting enough water to pump to

the house for domestic use that would function year round. This structure would need to be able to resist high flood flows during the rainy season.

Dry season base flow in stream.

Typical flow in stream during rainy season.

In several shallow excavations for tree planting near the surface, ground water was encountered in several places on higher elevations. It was also noted that the soil surface on the stream banks remained damp even during the driest part of the dry season. The soil around the house also remains humid to damp during the dry season. These factors along with the stream base flow in the dry season are indicators of relatively near surface ground water table. The soil is sandy with some clay material.

Ground water in hole dug for transplanting cacao tree.

Based on the conditions encounter at the farm site, it is believed that a shallow well would probably be the best method for supplying domestic water. A shallow well up to about 25 feet deep is possible with methods that don't require a drill rig or heavy equipment. These techniques are available to us and could be used on the farm site. The well could be pumped with a hand pump in the absence of electrical power. The tools for drilling the well would cost less than $750, and the well materials including the pump would probably be less than $2500.

With electrical power a motorized well pump could be used to pump water to a large storage tank on the hill above the house. This would require lower flow rates from the well and pump and still supply adequate water for the uses needed. With this type of system water could be provided for the kitchen, for a bathroom and shower, and for washing at the house. It would also provide water that is cleaner for drinking purposes, possibly without further need for purification.

Our investigations to date indicate that we could provide electrical power to the house through the use of solar energy. Systems are available that can produce a minimum of two kilowatts of energy in cloudy weather and even more in sunny weather. This along with a battery storage system could be used to provide electrical energy for the well pump as well as domestic use such as light, refrigeration, small kitchen appliances, computers, and other small electronics. The estimated cost of this type of solar electrical system would be $3500.

The farm workers currently travel to the market near Puerto Anapati every two weeks. They use a raft to go down river, and we pay for the small boat to carry them back. They buy staples in the market. They currently raise some vegetables and fruit on the farm and are working to increase the production for personal use. They also hunt and fish to provide fresh meat and treat it with salt to preserve it up to approximately two weeks. They are also starting to raise chickens for eggs and meat. Refrigeration would be a great asset for them. During my last visit we enjoyed meat from a giant armadillo.

Lúcio preparing the giant armadillo for cooking.

Coffee Project

In order to use the land more effectively and to provide more direct funding for the Anapati Discipleship Project, Jorge Ayala will clear 10 hectares of the farm land and plant coffee. This project is separate from the cacao project. We will loan him the land for five years. At the end of the five years the coffee becomes the property of the mission. Through several additional donors, we have raised the capital to loan Jorge the money for this project. This loan will be repaid from the coffee production and will be used to further capitalize other projects on the farm. After the loan is repaid, all of the profits will go to sustain the workers in the Anapati area as they carry on their ministry.

This project was started in June 2015. The land has been cleared for this project. The vegetation has been cut down and burned off. The coffee will be planted in the next couple of months. This project is on schedule.

Area cleared and burned ready for coffee planting.

Ministry

The Lord Jesus has been blessing the ministry in this region. Our team of national missionaries has grown. During this time some have come and gone and a few that have gone have returned. The current team is Jorge Ayala, Josué and his wife, Bani, and their two children, David C., Cesar, Jackson, and Norma. Jackson spends time working on the farm and in the ministry as he is trying to save enough money to get married. Once he is married he plans to return full time to the ministry work. Luis Ayala, Jorge's son, has left the team to pursue his college studies. David Vargas left the team to pursue additional studies as well, but recently expressed interest in returning to the team. Juan Carlos was recently removed from the team due to inappropriate behavior.

A number of leaders have been raised up from the Asháninka communities. The leaders are starting to take responsibility to lead the discipleship in their communities. This is a great blessing since we don't have enough national missionaries to meet the demand for discipleship in the region. This is occurring in all three Asháninka communities were our team has been ministering. These leaders will now be coming once a week to receive training in Puerto Anapati and going back to their communities to disciple. This transfer of responsibility has allowed us to enter an additional Ashaninka community, Pajonal, and hopefully will free our team up to enter other communities.

In April 2015, we held our first leadership training in Puerto Anapati with the national missionaries, the Asháninka leaders, and some of the colonial leaders from Puerto Anapati and

Shapo, where we also have discipleship ministries. The Asháninka leaders are from Boca Anapati, Yoyato, and Camabatbishi. The leaders from the Asháninka communities are Bernabe, Walter, Julian, Hilberto, Aurelio, Flor, Darwin, Vernon, Filipe, and Luila. Recently additional leaders from Camantabishi have step up, as well.

Leaders and Missionaries: (Back left to right) Mary Alice, Dina, Bani, Jhovana, Luila, Flor, Vernon, Darwin, David, Jackson, David (Front left to right) Josué, Efrain, Julian, Walter, Bernabe, Hilberto, John, Luis, Alberto (Kneeling) Jorge.

This effort was supported by several medical mission teams from Roswell United Methodist Church and Halltown Baptist Church. Medical missions were carried out in Puerto Anapati, Boca Anapati and Yoyato. These missions help the evangelism effort and open doors into the communities for our national workers that make the extension of the Gospel more effective and more rapid.

Summary

With respect to the cacao production, we are still behind our original schedule due to the damage done by the first two farm managers. We estimate that we have recovered to approximately 70% of where we should be at this time and with the grace of the Lord Jesus, we should be fully recovered and back on track by the end of 2016.

The coffee project is off to a very good start. We hope to see production from this part of the project in approximately 1.5 to two years as the plants begin to mature.

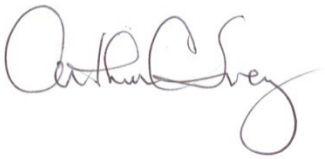
We hope to make additional improvements during 2016, which would include electrical system and water systems. We would like to build and install additional dryers and fermentation boxes. We have plans to modify the lower level of the existing house to provide for some product storage while it awaits shipment to market and additional lodging for other workers that will be needed for the harvest.

The ministry side of the work is growing well. Our biggest obstacle to greater growth is a lack of workers. As our local leaders take on more responsibility the national missionaries will be free to expand to other communities. We are planning a second level work shop for the local leaders in 2016, and if the demand is sufficient a first level workshop for new leaders. At this time we are not planning any more medical missions to this area for the next two years.

Thank you for your generous support of this project. We are grateful for your partnership in this Kingdom endeavor. We are excited about what the Lord Jesus will do through this project for the future expansion of His Kingdom, both in Peru and possibly abroad.

If you have questions, please don't hesitate to contact me. May God bless you

Respectfully submitted,



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