# ANPOP Trip Report July 2019

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## **Executive Summary**

Investments begun in 2017 and accelerated in 2018 are showing signs of paying off. After setting monthly records for oil production in January through April of this year, production fell as expected below previous records in May and June, though still ahead of 2018. Based on the present condition of the farm and the amount of fruit on the trees, production is expected to continue to outpace 2018 for the remainder of the year, such that the projection of 13,000 litres made in May seems conservative.

A year ago, the report was that evidence pointed to a conclusion that increased investment in pruning would pay off well in increased farm production. That evidence has continued to accumulate, and as a result that investment has continued and is now being increased, along with continued focus on harrowing and general cleaning.

The plan adopted in May accounts for continued deficit spending through 2019, with an expectation that further increases in farm production will lead to break-even or positive cash flow in 2020.

### Farm Tours

Pruning activity has begun on three of the farms, and is planned for all five, though perhaps more selectively at Ijaye and Olaoke Farms, the remaining two. Pruning was actively in progress during this trip at Awe Farm and Ogunkunle Farm. Many ripe fruits were harvested, and many more ripening fruits exposed as a result of the pruning efforts; at least some of this fruit would likely have been missed if not for the pruning. Photos from each farm include some pictures of well hidden fruit that the harvesters have typically missed in the past.

#### **Ogunkunle**

The first farm toured this year was Ogunkunle Farm, on Tuesday, 16 July. Once the crew had a suffi-

cient start at processing last week's harvest at the mill, we left to check on a new pruning crew. Three young men (pictured with Temi in Figure 2) had not previously been employed by Temi. The contract is for N300 per tree, and includes piling up the pruned fronds as well as cleaning around the tree. This crew brought their own climbing gear: two sets of steel cables, one around a thigh and the other under a foot, as seen in Figure 3. It seems more secure and safe than the rope our harvesters and other pruners use, but it is not adjustable, such that they cannot prune the trees with the largest girth. Sample results are shown in Figures 4 and 5.

The parts of the farm seen on this trip is illustrated in Figure 1, including two separate visits, as we returned to the mill during the visit so that Temi could assist in processing. We finished the visit Tuesday afternoon. Overall, there is a lot of fruit on this farm, perhaps as much or more than was seen during the peak of the season in April this year. There is a lot of ripe fruit, but also a promising amount of bunches that are expected to ripen over the next two months. Harvest for this farm was completed later in the week (after these photos were taken), starting on Wednesday and finishing on Friday. The harvest would not normally take that long, especially during this time of the year, but in addition to being more fruit than usual for July, one of the harvesters is temporarily unavailable. Some example of ripe and ripening fruit are shown in Figures 6–11.

#### Ijaye

We visited Ijaye Farm on Tuesday, 16 July, after finishing up at Ogunkunle Farm. A map summary of the areas path taken through the farm is shown in Figure 12. The first part of the farm is covered with a tall, leafy weed, despite harrowing last October, as shown in Figure 13. There is not much fruit at present on this part of the farm, but this section tall weeds is to be harrowed in the next few weeks, which we expect will improve the yield here next year.

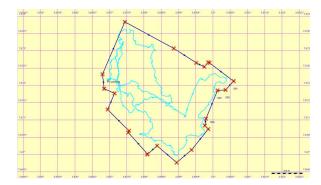


Figure 1: Ogunkunle Farm tour July 2019.



Figure 2: Pruning team on Ogunkunle Farm, pictured with Farm Manager Temi.

One section (shown on the map in Figure 12) has been planted in yams by one of our neighbors. The trees here are sparse enough and small enough to permit the yams to grow, and it is helpful for the trees to keep the weeds from growing around them. The yams are pictured in Figure 14.

Next to the yams is a small section planted in maize. Earlier this year this section was affected by fire, and to prevent the weeds from overtaking the freshly burned area, maize was planted — without plowing first. Despite the poor preparation, the seeds germinated well (Figure 15), and the maize is now close to being ready to harvest (Figure 16).

While most of the farm has very little fruit at this time, the most productive eastern end has as much or more fruit now than it did in April. Most is quite high, requiring the harvesters to climb, but the bunches are large, with most trees carrying multiple bunches. Some example photos are shown in Figures 17–21.



Figure 3: Pruning gear in operation at Ogunkunle Farm.



Figure 4: This area on Ogunkunle Farm has several pruned trees.



Figure 5: Example of a pruned tree, with the fruit now unlikely to be missed.



Figure 6: The left and right bunches are ripe (Ogunkunle Farm).



Figure 9: Two bunches on Ogunkunle Farm, one of them ripe.



Figure 7: This bunch on Ogunkunle Farm has about two weeks to go.



Figure 10: A well-hidden, nearly ripe bunch Ogunkunle Farm.



Figure 8: One ripe and another not quite ripe bunch Figure 11: A couple well-hidden bunches Ogunkunle on Ogunkunle Farm.



Farm, one of them ripe.

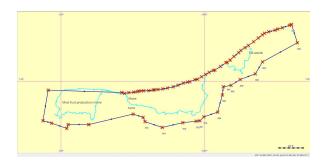


Figure 12: Ijaye Farm tour July 2019.



Figure 13: This section of Ijaye Farm will be harrowed in the next few weeks.

#### Awe

We visited Awe Farm on Wednesday, 17 July. Abigail joined us to collect fruit harvested by the pruning team on the previous two days. Following our visit to Awe Farm, I returned to site while Temi and Abigail continued to Ogunkunle to help with the harvest there. The path taken through Awe Farm is shown in Figure 23; the extreme western end was not visited this year, but a lot of trees were visited in the previously ignored (by me) northeast corner. The fruit collected from the pruners work is shown in Figure 22. An example of the results of pruning is shown in Figure 24.

Because there are large sections of good land on this farm where the trees have been lost to fire in the early years, this is a good place to plant maize, as shown in Figure 25. This section was planted ten days before this photo was taken — the germination rate seems very good. Walking the perimeter (shown in Figure 23) allowed the GPS to calculate the planted area at 14.7 acres; adjusting for internal sections not planted because of isolated palm trees, perhaps 14 total acres of maize is planted here.



Figure 14: Section of the Ijaye Farm planted in yams by one of our neighbors.



Figure 15: This area of Ijaye Farm was planted in maize following a fire earlier.



Figure 16: The maize here on Ijaye Farm will soon be ready for harvest.



Figure 17: The bunch in the right is probably ripe, with those on either side close behind. (Ijaye Farm)



Figure 20: Many will hidden bunches on this tree on Ijaye Farm.



 $\begin{array}{c} \mbox{Figure 18: Many large bunches here on Ijaye Farm,} \\ \mbox{most of them nearly ripe.} \end{array}$ 



Figure 21: A well-hidden ripe bunch on Ijaye Farm.



Figure 19: This bunch on Ijaye Farm is ripe.



Figure 22: Fruit from Awe Farm harvested by the pruners.

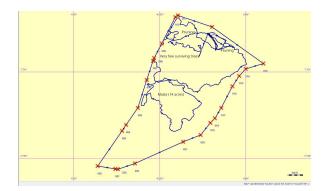


Figure 23: Awe Farm tour July 2019.



Figure 24: Many trees in this section of Awe Farm were pruned this week.

While significant portions of the farm are without fruit now after producing fruit earlier during the peak season, in some areas a majority of the trees are still carrying fruit. Harvesting was completed here last week; the ripe fruit shown in Figures 26–30 is scheduled to be harvested next week.

When we finished at Awe, Temi dropped me at the mission site and continued with Abigail to Ogunkunle to help with the harvest there.

### Olaoke

We visited Olaoke Farm on Thursday morning, 18 July. Harvest last week was interrupted when one of the harvesters was injured by a falling palm frond. While he recovers, the remainder of the harvest that could be reached from the ground was finished last week, but the ripe fruit that required climbing remains on the trees, and will wait for a qualified harvester to retrieve — probably early next week.

The general condition of the farm is illustrated in Figure 31. Except for the northeast section where the



Figure 25: About 14 acres of maize is planted here on Awe Farm.



Figure 26: A ripe bunch on Awe Farm, scheduled for harvest next week.



Figure 27: A bunch on Awe Farm probably ready for harvest in early August.



Figure 28: Another ripe bunch on Awe Farm.



Figure 29: Another ripe bunch on Awe Farm.



Figure 30: Another ripe bunch on Awe Farm.



Figure 31: Olaoke Farm is somewhat weedy, but generally the weeds are not tall enough to make it difficult to move about.

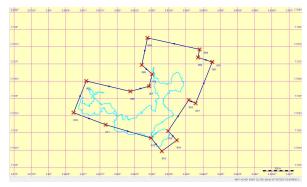


Figure 32: Olaoke Farm tour July 2019.

trees were almost all taken by rats in the first year, we traveled much of the rest of the farm, as shown in Figure 32.

Despite the fact that this is well past the peak of the season, perhaps three fifths of the trees are currently bearing fruit. During the peak in March and April, it would be more common for a tree to yield 2 or 3 ripe bunches at a time, but now the bunches typically ripen one at a time. Example fruit bunches are shown in Figures 33–38.

#### Omodeni

Omodeni Farm was the last to be visited, coming from Olaoke Farm on Thursday morning, 18 July. A large portion of the trees were visited in the best producing area in the northeast quadrant of the farm, while less time was spent in the rest of the farm. The path is shown in the map in Figure 39.

The hike was longer than normal, as a large project adjoining our property has rebuilt the road into a



Figure 33: On the Olaoke Farm, a ripe bunch on the right, and another on the left likely ready in two more weeks.



Figure 36: This ripe bunch on Olaoke Farm was not ripe during last week's harvest.



Figure 34: Multiple bunches here on Olaoke Farm, with the one on the front right ready for harvest.



Figure 37: Several bunches here on Olaoke Farm on a tree that has not been harvested yet this year.



Figure 35: The front bunch here is ripe (Olaoke Farm).



Figure 38: This well-hidden bunch on Olaoke Farm was missed.

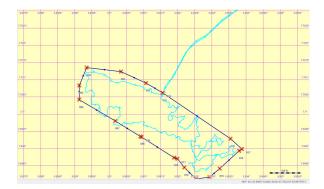


Figure 39: Omodeni Farm tour July 2019.



Figure 40: The road is blocked while this concrete culvert sets, about a quarter of a mile from the farm.

quality gravel road, but the road is blocked while the concrete culverts set (Figure 40). The extra approximately quarter of a mile is shown on the map of the tour in Figure 39. In the long run, the quality road will be an benefit, but in the short run it is expensive to hand carry all the harvested fruits the extra quarter of a mile.

An estimated one third of trees on Omodeni Farm are carrying bunches at present. This is not as high a percentage as on Olaoke Farm or Ogunkunle Farm, but much better than Awe or Ijaye Farms. Recent efforts in clearing and pruning are showing some results. Sample photos are shown in Figures 42–46.

As on other farms, some pruning work has been recently undertaken at Omodeni Farm. An example is shown in Figure 41.

# Mill Operations

The pile of fruit shown in Figure 48 is ready for processing at the mill. While the report from last year



Figure 41: This tree on Omodeni Farm was recently pruned, exposing ripening fruit that might have been missed otherwise.



Figure 42: One of these bunches on Omodeni Farm is ripe and schedule to be harvested next week. More bunches will follow in another couple of weeks.



Figure 43: These Omodeni Farm bunches will likely not be ripe until September.



Figure 44: A ripe bunch on Omodeni Farm.



Figure 45: Ripe and nearly ripe well-hidden bunches on Omodeni Farm.



Figure 46: A well-hidden bunch on Omodeni Farm.



Figure 47: A ripe bunch on Omodeni Farm, likely to be missed if this tree is not pruned in time.



Figure 48: These fruit bunches, along with the more recently harvested loose fruits are ready to be split, sterilized and fed to the screw press.

at this time was of disappointing harvests, this year is coming in much better, such that the month total is likely to be more than any previous year except 2016, which still holds the monthly records for May through September. Because of equipment difficulties, the processing was not completed on Monday, but by Tuesday everything was working correctly. The screw press operation is shown in Figures 49 and 50.

The separating and bagging of the kernels (Figure 51) is far ahead of last year's pace. The record quantity of of the harvest this year has made it more important to not let the pile of fiber and kernel waste grow too large. Processing of the kernels will wait until the rains end around October, to facilitate drying of the kernels before cracking and to reduce the risk of mold in the cracked nuts.



Figure 49: John is monitoring the screw press in operation.



Figure 50: Oil coming our of the screw press. It remains to clarify the oil (clean and remove water).



Figure 51: Palm kernels separated and bagged. They will be dried and cracked once the rains stop.

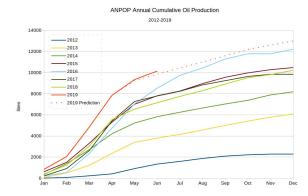


Figure 52: Annual cumulative palm oil production comparison, through June 2018.

### **Nursery Operations**

We have not maintained a nursery for a couple of years, every since we had difficulty selling the last crop of seedlings we raised. The cattle herders have become more prevalent throughout the area, and it has become increasingly difficult for farmers, including us, to prevent the cattle from eating and destroying young palms. The last year with any significant revenue from the nursery was 2016.

However, there have been many inquiries this year, asking if we have seedlings for sale — this had not been the case for the past few years. Perhaps farmers have become more adept at fencing the cattle out of critical areas. In addition, in a meeting with the governor during this trip, he mentioned his determination to get a law passed in the next two months to restrict the free grazing of cattle in Oyo State, designating certain areas for cattle. If successful, this would seem to increase further the demand for seedlings. So, although spending on a nursery will further increase our deficit this year, the return we would expect next year makes investing in a nursery a high priority.

# **Projections**

Oil production through June is shown in Figure 52, with comparison to previous years and a forecast made in April. The investments in farm cleanliness and tree pruning appear to be paying off, encouraging us to continue to invest aggressively in farm maintenance. While the margin of production increase over our previous record production in 2016 has started to decline, as predicted, production is outpacing the projection made in May, and promises to be our best production year ever.

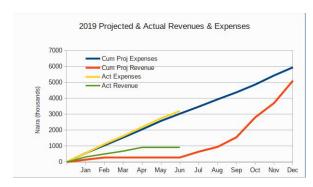


Figure 53: 2018 ANPOP revenue and expenses tracking through June.

Figure 53 shows revenues and expenses tracked through June, compared to budget forecasts set at the beginning of the year. Projected revenues include N500,000 from maize, which may be slightly conservative, N500,000 from kernels, which again seems slightly conservative in view of the slightly stronger than expected harvest, and a N300 per litre average oil price for the year on 13,000 litres. The oil price may be a bit optimistic, but early signs are for a strong price in the fall. We will probably exceed the 13,000 litres by about 500 based on current estimates. On the other hand, the N200,000 planned from cassava is unlikely to materialize; that crop is lost.

On the expense side, we are accelerating somewhat our investments in pruning and cleaning, encouraged by the slightly stronger than expected farm gains. In addition, based on strong demand for nursery stock, we plan now to invest \$\fomale^{15}0,000\$ to \$\fomale^{20}0,000\$ in a nursery, for revenues that will not appear until 2020. So we will probably overspend our budgeted expenses by \$\fomale^{40}0,000\$ to \$\fomale^{5}00,000\$.

If these projections hold, that will lead to negative cash flow of just under \$1.5 million for 2019. But building on this investment, we expect the farm to be on pace for better than 16,000 litres of oil production in 2020, plus some nursery revenue, which should put us in the black next year and going forward.

### Conclusion

There are strong signs that the investments in farm maintenance are paying off. As we concluded before, the long term success of ANPOP depends on improved efforts toward farm cleanliness and tree pruning, and we will have to maintain some level of increased spending compared to the leanest years in order to do this. But with expectations for further growth in farm production plus renewed interest in nursery stock, our expectation is that sustainable profitability should be in reach by as early as 2020.