
BAUERS FAMILY TREE FARM NEWS

Miramar Costa Rica



FARM UPDATE

May 2022

As we are coming into the rainy season in the beginning of May 2022 it seems as though the world is finally moving past the COVID pandemic and some of the problems the pandemic brought with it. We have held off on writing this farm update so that we can bring more clarity on where the farm is and where it is headed. Over the last year the farm has continued to look good. The trees are showing continued growth and there have not been any significant or widespread issues with any of the trees. The weather has been favorable and consistent with a marked rainy and dry season allowing the trees to grow and produce quality wood. Some of the larger girth trees on the farm are more than 16 inches in diameter and have long straight boles which is important to maximize the amount of lumber that can be taken from a tree. In addition, a few select trees have been cut so that we could observe the color and the growth ring/ grain characteristics. Both the color and grain are looking favorable from the cuttings. Overall, we are pleased with the growth and expect to get a good volume of wood out of the farm as we continue to grow the trees for the next ten years.



FARM UPDATE CONTINUED

We have spent the last six months working with buyers and setting our plans for extraction of the wood. With this we have obtained good information on the current pricing and current extraction costs for the teak trees and are ready to begin cutting and selling this thinning of the trees. In addition to pulling together the prices and costs a large part of the preparation was getting the farm ready for the work. We made significant upgrades to the internal roads that will allow larger trucks to make it to each section of trees that are to be thinned and taken out. We have also secured a dedicated truck that can be used for the extraction of the wood. We also preformed a full survey of the farm and marked approximately 4,200 trees that will be thinned and sold. The dry season is only 4 months long and due to amount of time it took to preform all this work we are running straight back into the rainy season. Excess rains on our internal roads will make it impossible for the larger trucks to get in and out of the farm so rains will dictate how quickly, or slowly wood cutting will happen. The good news is that several areas at the front of the farm will remain accessible for some of the rainy season and we will be able to continue to take wood out. The expected result is that we will be slowly taking the 4,200 trees out of the farm over the course of the remainder of 2022 and we will finish in early 2023 as the dry season is back.



FARM UPDATE CONTINUED

Some other preparations that we have made are to start extracting some small amounts of other species of trees that we have on the farm in small amounts. To date we have taken out about ten truckloads of these other species. This has allowed our crews to make sure our extraction process will work and will be efficient.

This is what we have learned in terms of pricing and extraction costs for the upcoming teak thinning. Please keep in mind that we are going to be thinning the smaller weaker trees for the most part and leaving the bigger and better trees to continue to grow. We have found over the years that commercial markets like to talk in volume using cubic meters and as such the pricing is in those terms. We will however try to convert this into a formula on a per tree basis. Logs are priced based on the diameter or circumference with smaller logs getting smaller prices per cubic meter than larger logs. This is because more quality lumber can be taken from a larger log with less processing costs. Current prices we are seeing are ranging from about \$180 per cubic meter up to about \$450 per cubic meter. Extraction costs are looking to come in around \$51 per cubic meter. Based on these prices/costs and projected future growth of the trees we are projecting a positive rate of return for all involved.



FARM UPDATE CONTINUED

To translate cubic meters of volume to a per tree basis we have come up with the following. Over the course of the full 25-year growing period, we estimate each tree will generate .25 cubic meters of wood on average. This takes in account the outcome for every tree including trees that have been or will be culled with no value up to the biggest and best trees that will see several cubic meters of wood per tree. With the current thinning of trees, we are estimating we will harvest about 10% of the total volume that will come out of the farm over time. The percentage amount is smaller due to the smaller less favorable trees been thinned first to make room for the bigger trees to grow.

Although we do see the price for this thinning staying as is, we are hopeful the future price for teak logs will continue to grow. Inflationary pressure that is currently happening should certainly add to this. In addition plantation teak wood is gaining traction as an attractive and useful wood and as demand goes up the price should follow. We have seen historical price increases around the 5% mark so hopefully that trend will continue or be boosted by inflationary pressure.

Based on the projection of volume of wood and the timing of taking it out we are hopeful to be making distributions to all involved by the end of this year or perhaps within a few months after depending on when this initial thinning is completed. We are extremely grateful to have a strong healthy tree plantation and look forward to continuing to grow and harvest trees for the next 10 years.



ENVIRONMENTAL BENEFITS

Costa Rica continues its dedication and as an example to the rest of the world on caring for the environment. Below are two articles from a local Costa Rican English language newspaper, The Tico Times. They highlight Costa Rica's dedication to the environment and overall being a great place to live and an example of how to live a healthy long and fruitful life.

Germany donates 10,000 trees to Costa Rica

The government of Germany, through its San José Embassy, donated 10,000 trees to Costa Rica's Huella del Futuro initiative to celebrate the Central American nation's bicentennial.

This donation adds to the 130,000 trees that Germany and the European Union already provided to Costa Rica through the Green Development Fund for the Central American Integration System (SICA) region. The ultimate goal is for Costa Rica to reach 60% forest coverage by 2030, which is meant to combat the effects of climate change and support sustainable development.

The first tree was planted Monday in the Northern Zone during a ceremony at the "La Loma" farm in the Nataniel Arias Murillo Professional Technical College in Aguas Zarcas. "I am deeply grateful to the Government of Germany, through Ambassador Martina Nibbeling, for the adoption and donation of these 10,000 trees, which will positively impact not only the ecosystems of the cantons of San Carlos, Guatuso and Upala but also the students and women beneficiaries, through four eco-forests that will make up the Friendship Route of Germany and Costa Rica," replied the Vice President of the Republic, Epsy Campbell.

Costa Rica's "Huella del Futuro" campaign had the goal of planting 200,000 trees in nine northern cantons by September 2021. So far, 172,000 trees have been planted, thanks in part to previous contributions from the German Cooperation Agency for Development (GIZ), the European Union (EU) and the Central American Commission for Environment and Development (CCAD).

When the program was launched, Vice Presidency Epsy Campbell said it symbolized a "great moment to leave an indelible and sustainable footprint" on the world.

"Together, we can address the challenges we currently face as humanity, such as the mass extinction of species, the climate crisis, the need for an inclusive economic recovery after the impact of the COVID-19 pandemic, as well as the empowerment and autonomy of women," Campbell said.

Costa Rica hopes to plan and maintain 65,000 fruit and flower trees lining public roads; 120,000 trees for timber; and 15,000 trees in secondary forests. All will be native tree species. The project will also generate 200 jobs, according to the National Forestry Financing Fund (FONAFIFO).

Those interested in donating or tracking the campaign's progress can do so at huelladelfuturo.cr.

"Huella del Futuro" also suggests volunteer opportunities for those interested in conservation work and allows Costa Ricans to register their own reforestation projects that could benefit from additional visibility.

Today, about 57% of Costa Rica is considered to be under forest cover, a figure that has doubled since the country began efforts to combat deforestation in the 1990s.

The corner of Costa Rica where people live on, and on

Aged 94, Saturnino “Sato” Lopez rises early each day, chops wood and takes long walks in a part of Costa Rica that’s a global oddity: like him, people there tend to live a very long time.

Home for Sato is the Nicoya Peninsula, where 1,010 people aged 90 or older live in a so-called “Blue Zone” — five areas around the world where life expectancy is particularly high.

And these people did not move to the peninsula, located in the northwest of Costa Rica. Rather, they have always lived there.

“At my age, I feel well because the Lord gives me strength to walk at ease. I go out, walk maybe a kilometer (around half a mile), or four kilometers, and I return, no problem,” said Lopez. His house in a village called Dulce Nombre — Sweet Name — is a sort of nature refuge.

The village’s wood, concrete and stick-and-mud houses are surrounded by vegetation and cicadas drone non-stop. The Covid-19 pandemic has gone easy on this village.

“During the day if I have to sweep the patio, I sweep. If I have to chop wood, I chop, also. A bit of everything,” said Lopez.

Blue Zones

In the late 20th century, demographer Michel Poulain and a physician named Gianni Pes used a blue marker to highlight on a map the Barbalia region of Sardinia, Italy, where they found people lived a very long time.

In 2005, an American author and National Geographic fellow named Dan Buettner discovered similar characteristics in Loma Linda, California; Ikaria, Greece; Okinawa, Japan, and Nicoya. So what is their secret?

“The main food is rice and beans. A bit of meat, fruit, avocado. That is what you eat. They say this is good food,” said Lopez.

His neighbors Clementina Espinoza, 91, and her husband Agustin, 100, follow a similar diet. Espinoza has outlived six of her 18 children. She walks slowly but steadily, and still tosses corn to her chickens, prepares meals and washes up afterward.

She exhibits robust energy in a country where the life expectancy is a mere 80. For the world in general it is 72, the World Health Organization says.

“Out in the countryside, life is quieter,” said Espinoza, insisting that diet is key. “You are more relaxed and there is not so much danger.”

Having purpose is key

Having goals is critical to aging well, said Aleyda Obando, who works in the social security administration in Nicoya.

“They thank God for being alive and they make plans, to plant something or go see friends,” said Obando. “It is a combination of factors that makes these people last longer.”

It also helps to have a social support network, exercise, eat healthy food and minimize stress. “We grew corn, rice, beans, everything. We grew what we ate,” said Clementina. Now, her daughter Maria looks after her.

Agustin, one of 53 people in the area who are 100 or older, is blind now and suffered a stroke. Still, you can tell he likes it when Clementina caresses him.

The country’s environment minister explains that despite the fact that Costa Rica’s strategy in reforestation and encouraging environmentally friendly behaviour can be applied anywhere, ‘principle and values’ are required, too. He noted that ‘good governance, strong democracy, a respect for human rights and a solid education system’ is vital for success. Madrigal-Cordero added that the secret to Costa Rica’s environmental triumph is a generation of peace. She says, “nature is in our DNA.”

Back in the saddle

Jose Villegas is another centenarian, who lives in the neighboring village of San Juan de Quebrada Honda, with one of his eight daughters.

He is hoping that when he turns 105 on May 4 he can once again ride a horse — he used to make his living on horseback, herding livestock. But sometimes he has trouble with his legs.

Being 104, he says, “is a big deal because God has given me a lot of life. It was not fantastic but it was not bad, either,” said Villegas, sitting in the house he was born in.

“Now, lifestyles have changed. It is not the same as before. Things used to be healthier and people loved each other a little bit more,” said Villegas, who became a widower seven years ago and spends his evenings listening to folk music.

Gilbert Brenes, a demographer at the University of Costa Rica, said the Blue Zone’s elderly population may peak in the next 20 or 30 years and then decline.

Younger generations have different diets and suffer more from diseases like obesity and diabetes. And fewer and fewer people grow what they eat.

But Saturnino Lopez, a father of nine, remains active.

“My children say to me, ‘you no longer work. We have to work to support you.’ But I don’t like that, because I know what keeps me going,” he said, referring to physical activity like cutting wood. “Even if it is just a couple of blows with the machete, that’s enough.”

Thank You

We thank you for your continued support and we look forward to begging the process of selling timber and managing the farm for our future harvests as well.

Jake, Joe and Jaime

