

The following projections are offered by one of several Costa Rican companies selling interest in wood only. They use your money to buy the land. They keep all the land and they keep all the government subsidies. Whereas with investment in KC Pacific – You retain interest in the majority of the land purchased with your funds, You receive the government subsidies as payouts AND you receive the added value on the land from the trees when we sell. These projections are presented only to show the enormous value in teak:

Smart Money Magazine writes that " . . . real prices for timber have steadily risen for more than 100 years - better performance than any other commodity . . ." Smart Money also says that ". . . timber is a near perfect asset."

Teak Projections

Teak

The [projections](#) below show the projected growth, harvests and yields from planting 100 teak trees in an average plantation in Costa Rica. We encourage you read this whole page because it provides the basis for the projections.

The projections below reflect actual results from earlier thinnings together with historically-based data for subsequent thinnings and final harvests.

Two principal factors generate the yield in growing tropical hardwood trees for harvest - the trees' growth and the increase in value of their hardwoods as the trees mature.

A wonderful benefit of fast growing precious tropical hardwood trees is that they keep right on growing irrespective of the daily headlines or the direction of the stock market.

The market price of the lumber that the teak trees produce is determined by the dimensions, quality and maturity of the lumber, which in turn are related to the genetic quality of the trees and age and size of the trees thinned and harvested that produce the lumber. The dimensions, quality, and desirable characteristics and therefore the value or price of the lumber generally increase with the age of the trees.

As the world's demand for beautiful tropical hardwoods continues to increase, and as the world's supply of tropical hardwoods continues to diminish through exploitation, deforestation and alternative uses of the land, precious tropical hardwoods are becoming increasingly scarce and their prices continue upward.

The tables below are based on tropical hardwood lumber prices increasing at various rates, 0%, 5% and 10%.

For example, teak lumber from 7 year old trees sells today for approximately \$0.65 per board foot . That same 7-year teak lumber, assuming an increase in price of 5% per year, will sell for \$0.91 per board foot 7 years from now. And teak from 20 year old trees that would average \$3.11 per board foot today, if the prices increase at 5% per year, will sell for \$8.25 per board foot 20 years from now.

Projections shown are at 0%, 5% and 10% projected increases in the value of teak.

To be conservative, the projections below do not include the possible higher-value veneer logs from the final harvest.

Teak - 20 Year Final Harvest - 100 newly planted trees [10%](#) [0%](#) [5%](#)

Teak - 20 Year Final Harvest - 100 newly planted trees, 10% annual increase in teak lumber prices

Tree Age	# of Trees Before Harvst	Number of Trees Harvestd	Useable Tree Height - Feet	Tree Diametr - Inches	Marketable Wood per Tree - Brd Feet	Marketable Wood per Tree - Cubic Mtrs	Gross Harvest Proceeds	Harvest and Processing Costs	Net Harvest Proceeds	Care/Management Fee	Net Profit per Harvest	Cumulative Net Proceeds
Notes : 3		3, 4	5	5	7	7	8	9	10	11	12	13
	100	15	(mortality and cull loss)									
7	85	25	22	7	21	0.05	\$654	\$292	\$362	\$0	\$362	\$362
10	60	18	29	10	62	0.15	\$2,160	\$835	\$1,325	\$0	\$1,325	\$1,687
13	42	15	35	12	118	0.28	\$13,859	\$1,771	\$12,088	\$827	\$11,262	\$12,948
17	27	10	40	15	230	0.54	\$32,060	\$3,367	\$28,692	\$1,722	\$26,971	\$39,919
20	17	17	43	17	344	0.81	\$122,226	\$11,397	\$110,829	\$6,650	\$104,179	\$144,099
IRR 14	21.8 %											

Teak - 20 Year Final Harvest - 100 newly planted trees, 0% or no annual increase in teak lumber prices

Tree Age	# of Trees Before Harvest	Number of Trees Harvested	Useable Tree Height - Feet	Tree Diameter - Inches	Marketable Wood per Tree - Board Feet	Marketable Wood per Tree - Cubic Meters	Gross Harvest Proceeds	Harvest and Processing Costs	Net Harvest Proceeds	Care/Management Fee	Net Profit per Harvest	Cumulative Net Proceeds
Notes: ³		^{3,4}	⁵	⁵	⁷	⁷	⁸	⁹	¹⁰	¹¹	¹²	¹³
	100	15	(mortality and cull loss)									
7	85	25	22	7	21	0.05	\$335	\$150	\$186	\$0	\$186	\$186
10	60	18	29	10	62	0.15	\$833	\$322	\$511	\$0	\$511	\$696
13	42	15	35	12	118	0.28	\$4,015	\$513	\$3,502	\$0	\$3,502	\$4,198
17	27	10	40	15	230	0.54	\$6,343	\$666	\$5,677	\$592	\$5,084	\$9,282
20	17	17	43	17	344	0.81	\$18,168	\$1,694	\$16,474	\$988	\$15,486	\$24,768
IRR ¹⁴	10.1%											

Teak - 20 Year Final Harvest - 100 newly planted trees, 5% annual increase in teak lumber prices

Tree Age	# of Trees Before Harvest	Number of Trees Harvested	Useable Tree Height - Feet	Tree Diameter - Inches	Marketable Wood per Tree - Board Feet	Marketable Wood per Tree - Cubic Meters	Gross Harvest Proceeds	Harvest and Processing Costs	Net Harvest Proceeds	Care and Management Fee	Net Profit per Harvest	Cumulative Net Proceeds
Notes: ³		^{3,4}	⁵	⁵	⁷	⁷	⁸	⁹	¹⁰	¹¹	¹²	¹³
	100	15	(mortality and cull loss)									
7	85	25	22	7	21	0.05	\$472	\$211	\$261	\$0	\$261	\$261
10	60	18	29	10	62	0.15	\$1,356	\$525	\$832	\$0	\$832	\$1,093
13	42	15	35	12	118	0.28	\$7,570	\$967	\$6,603	\$462	\$6,141	\$7,234
17	27	10	40	15	230	0.54	\$14,538	\$1,527	\$13,011	\$781	\$12,230	\$19,465
20	17	17	43	17	344	0.81	\$48,206	\$4,495	\$43,710	\$2,623	\$41,088	\$60,552
IRR ¹⁴	15.9%											

NOTE: THE PROJECTIONS IN THE TABLES ABOVE AND THE EXPLANATORY NOTES BELOW ARE PROVIDED FOR YOU TO BETTER UNDERSTAND THE PROCESS OF GROWING AND HARVESTING TEAK TREES. WHILE WE BELIEVE THESE ESTIMATES OF GROWTH, COSTS AND YIELDS TO BE FAIR AND REASONABLE, WE CANNOT GUARANTEE THE FUTURE VALUE OF YOUR TREES, NOR THE LUMBER OR PROCEEDS YOU WILL RECEIVE FROM THEIR THINNING OR HARVEST. IF YOUR DECISION TO HAVE US PLANT TROPICAL HARDWOOD TREES FOR YOU IS MOTIVATED BY THE EXPECTATION OF FUTURE PROFITS, WE ENCOURAGE YOU TO SEEK THE COUNSEL OF AN INDEPENDENT PROFESSIONAL WHO CAN EVALUATE THE REASONABLENESS AND ACCURACY OF THESE PROJECTIONS.

Notes to Projections

1. The projections in the tables above are based upon the approximate current mill-run teak lumber prices shown below for lumber from the thinnings and final harvest of seed-grown teak trees at the ages shown.

For two examples, teak lumber from the thinnings of 7 year old teak trees is worth today about \$0.65 per board foot or \$276 per cubic meter on the local market, while teak lumber from 20 year old teak trees is about \$3.11 per board foot today, or \$1,318 per cubic meter on the international wholesale market.

Seed-Grown Teak Lumber		
Tree Age	\$ per Board Foot	\$ per Cubic Meter
7	\$0.65	\$276
10	\$0.75	\$318
13	\$2.27	\$962
17	\$2.76	\$1,171
20	\$3.11	\$1,319

Note: Mill-run means the average of all of the qualities of lumber resulting from the milling of the trees, ranging from the very best quality teak from the first log closest to the ground, to teak from the upper logs with knots and other defects.

It is also important to note that young teak from the earliest thinnings is quite beautiful and wonderful for indoor furnishings but does not yet have the characteristics of adult teak.

Those adult characteristics begin to appear in the lumber from approximately age 13 or later and increase as the trees mature. (You are welcome to read more in [Young Tropical Hardwoods](#)) That increase in adult characteristics is reflected in the teak lumber pricing listed above.

For the most recent report by the ITTO of current teak lumber prices in the US and European markets, go to [Teak Lumber Prices](#).

2. The projections in tables above are based upon the price of teak lumber increasing at 5% per year.

For example, teak lumber from 7 year old trees that sells today for \$0.65 per board foot (from note [1](#) above), that same 7-year teak lumber, increasing at 5% per year, would sell for \$0.91 per board foot 7 years from now. And teak from 20 year old trees that would average \$3.11 per board foot today, increasing at 5% per year would sell for \$8.25 per board foot 20 years from now.

So that you can better evaluate different annual increases in teak lumber prices, in addition to the 5% increase in teak lumber prices in each of the tables above, we have also included links for each table to show the results at 0%, or no increase, and 10% annual increase in teak lumber prices.

Historically, according to the United Nations FAO publication [Forest Products Prices](#), the median export/import prices of teak rose at an average rate of 9.7% per year for the 18 years from 1970 to 1988 (the last year of the report), and 13.2% per year for the last four years of the report.

3. Both the timing and number of trees harvested are based upon on a combination of our experience and the experience of our professional foresters, as well as the latest published silvicultural practices derived from years of others' experience in teak plantations.

The actual thinnings and harvests of your trees will be determined by our professional foresters, who monitor the growth profiles of your trees in the plantations.

4. The projections above include a mortality and cull loss of 15%. The most likely period of mortality or cull loss is during the first years after field planting. Our foresters will examine your trees frequently during this period and, during the first year, we will promptly replant, at no charge to you, any tree that is not healthy or in any way not growing properly.

5. The height and diameter growth estimates are based upon growth rates on our farms as well as those obtained in well cared for plantations on good sites in Central America and the Caribbean.

6. For teak, our estimated volume per tree is arrived at by multiplying the basal area of the tree ($\text{Pi} \times (1/2 \text{ diameter})^2$) times the usable height of the tree, and then reducing the result by 35% to account for the taper.

7. The amount of marketable wood per tree is stated both in board feet, a standard lumber measure used in the U.S., and in cubic meters, a standard lumber measure used throughout the world. One board foot is one foot square by one inch thick (12" x 12" x 1"). There are 424 board feet in a cubic meter of lumber.

The amounts of marketable wood for the thinnings and final harvest are based upon the calculated volume per tree⁶ and then reduced by the estimated amount of processing waste, which is sawing losses and damage to the logs while being harvested, transported and processed. The inefficiency of smaller diameter logs results in greater sawing loss on younger, smaller trees. Accordingly, we have subtracted a processing waste of 55%, 50%, 45%, 40%, 35% and 30% respectively for the 7, 10, 13, 17, 21 and 25 year teak trees.

8. Gross harvest proceeds, the estimated gross value of the lumber from each thinning and harvest, are arrived at by multiplying the number of marketable board feet per tree times the price per board foot at the time of harvest (see Notes [1](#) and [2](#) above) and then multiplying the result times the number of good trees harvested in that thinning or harvest.

9. Harvest and processing costs are the direct costs of harvesting, milling and drying your lumber. The harvest and processing costs shown in the tables above are based on actual harvest and processing costs of \$0.29 per board foot, increasing annually at the same annual rate as the projected increase in the price of the teak lumber.

10. Net harvest proceeds are arrived at by subtracting the estimated harvest and processing costs from gross harvest proceeds.

11. The care and management fee is a typical allowance for managing the care and maintenance of your trees and the harvest, processing and sale of hardwoods in a typical plantation. Care and management fee is fixed at 6% of the net harvest proceeds.

12. Net profit per harvest is estimated net cash flow from each thinning and harvest.

13. Cumulative net proceeds is a running total of your estimated cash flow from the thinnings and harvest of your trees if you have us sell your lumber.

14. The IRR, or internal rate of return, is the calculation of the annual compound return on investment from the projected cash flow if you have us sell your lumber for you, based on the 100-tree price of \$4,998 for 20-Year Final Harvest Teak trees. Lower tree prices for higher quantities would result in higher projected IRR's than those shown in these projections.