

**Costa Rica:  
In Depth Coffee Report  
Cost Structure**



## Costa Rica Cost Structure

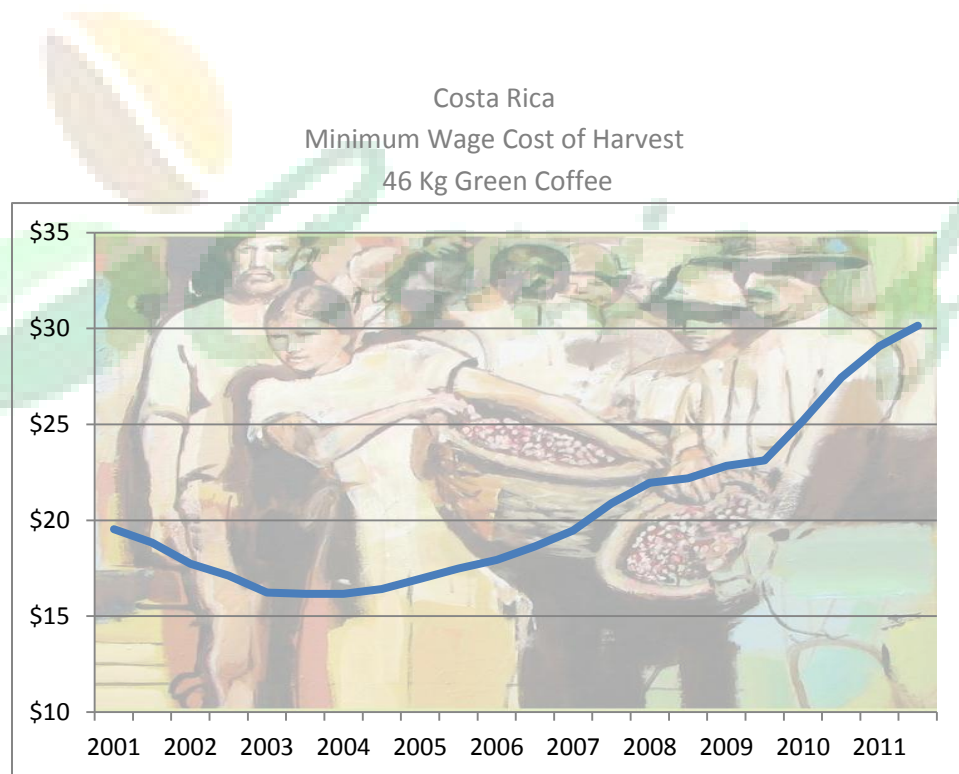
### Farm Costs:

Costa Rica's production faces a constant threat of labor shortage. This means that salaries are usually under pressure, as they need to compete with other export agricultural crops like sugar cane, pineapples, oranges and melons, and with construction for unskilled labor<sup>1</sup>.

Traditionally the solution for this limitation has been the use of foreign labor, mainly from Nicaragua. However new legislation and active measures from the authorities has limited the inflow of migrant workers.

Labor is obviously the key component of coffee growing. In the case of Costa Rica this factor has been steadily growing in the last years, as wages grow as a result of the chronic scarcity, but mostly lately due to the effect of the currency appreciation that was mentioned before.

The following graph illustrates the cost of picking.



At the beginning of the prior decade, picking wages dropped from their historic average of \$20 per the equivalent of 46 kg. This happened as part of the price crisis was shifted down towards the worker. This wasn't done without cost, since in order

<sup>1</sup> As an example, at the peak of the construction boom in Guanacaste that matched the US Real Estate Bubble, buses departed on a weekly basis at dawn every Monday taking workers from the coffee growing county of Naranjo, in the heart of the West Valley to the construction sites, where pay was much higher.

to enhance productivity the quality of harvesting practices dropped.<sup>2</sup> Several nationwide awareness campaigns were required to improve again the quality of the picked cherries.

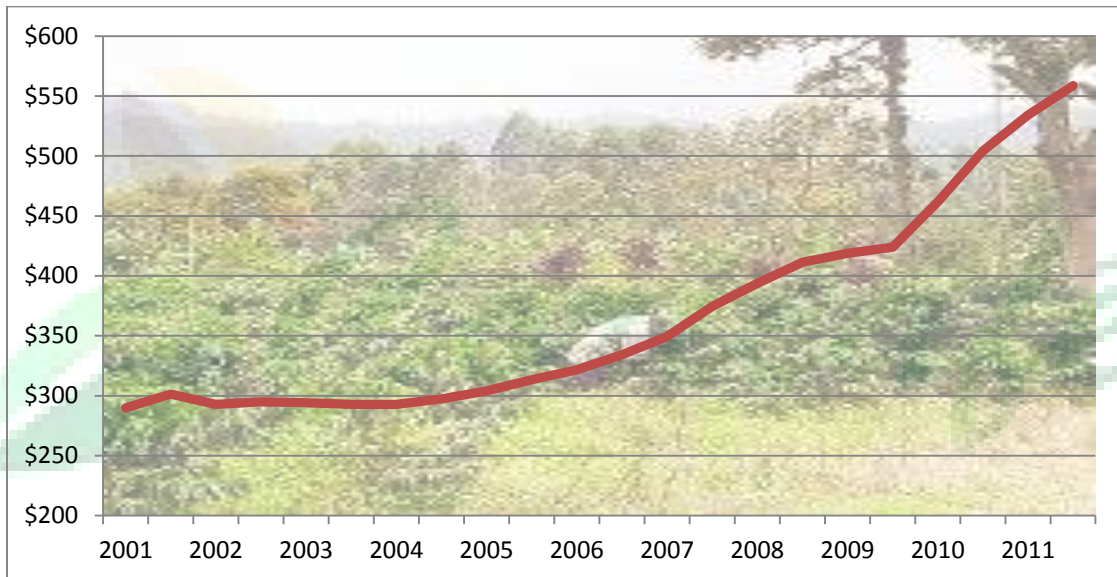
The amount paid bottomed around 03/04 at \$16, to start to climb back, helped by the booming prices. By 2007 it has gotten back to the \$20 level, however it didn't stop there, instead harvesting costs have risen constantly, with the minimum wage reaching \$30 by the end of 2011.

Actual costs are even higher. While compared with a high yield large estate the minimum wage was a good approximation for the past crops, but could be assumed that low yielding farms had a higher cost. However, driven by high prices and tougher migratory controls, harvesting costs have went up significantly above the minimum wage, and have been close to \$40 per the equivalent of 46 kg green of cherry since 10/11.

For the 2011/12 crop ICAFE estimates that 50% of the labor force required for harvesting was provided by foreigners, mainly Nicaraguans but with an important share of Panamanians, and actual costs reached \$47/46 Kg

Obviously the growth in costs has not been limited to harvesting. The following chart illustrates how the cost of regular labor has suffered the same explosive growth in the past years.

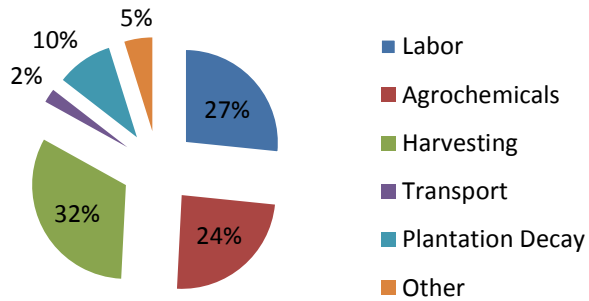
Costa Rica Minimum Wage  
Monthly Cost per Unskilled Agricultural Worker<sup>3</sup>



<sup>2</sup> Harvesting by stripping, bringing all cherries in the branch, is obviously faster than the careful selection of ripe cherries only.

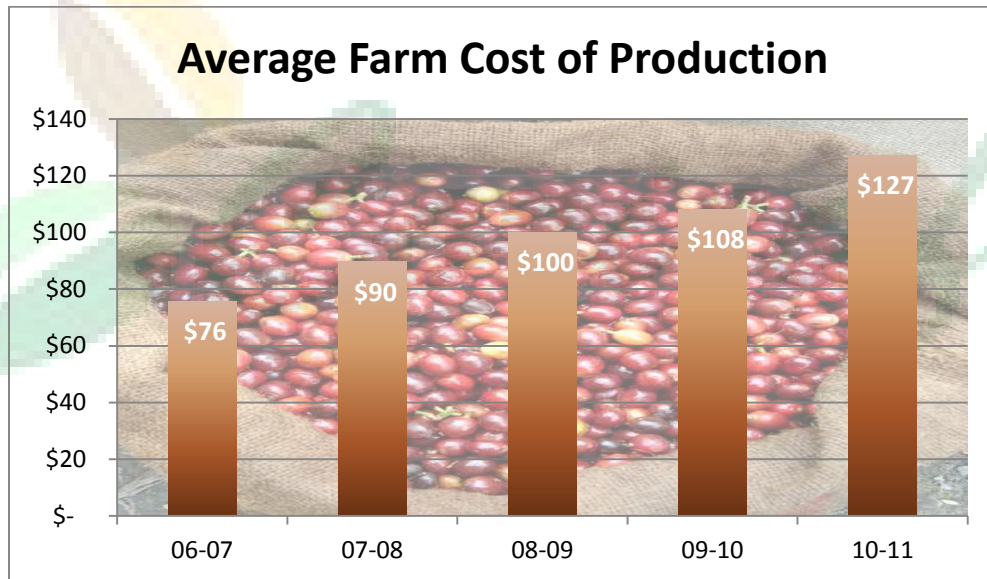
<sup>3</sup> The minimum wage is published as the per day salary of an unskilled worker per 8 hours of non heavy or hazardous work (the same salary is used for these jobs but then it is for 6 hours) The calculation was made assuming a working month of 26 days, and adding 30% to cover basic payroll charges.

### Costa Rica Distribution of the Farmer Cost of the Production



These increases in labor-related expenses determine at the same time a skyrocketing on the total cost of production, since, as the graph on the left shows, they represent 59% of total cost of production. Of this expense list 35% are variable and directly linked to the actual produced volume (Harvesting and Transport) while the balance are relatively fixed

As a result since crop year 06-07 until 10-11, costs of production increased by increased by 67%<sup>4</sup>



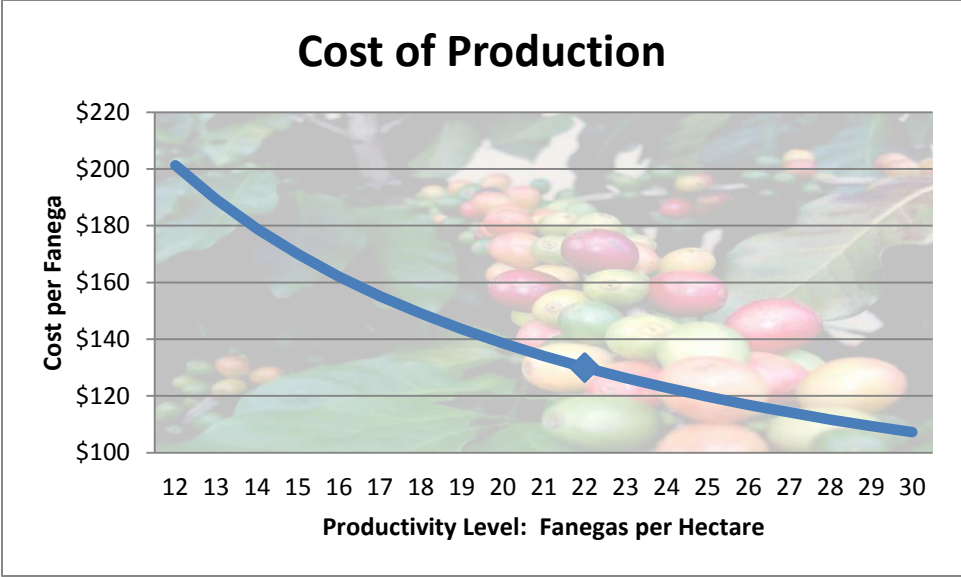
These costs include all concepts all the way to delivery to the mill receiving station, and are based on the national productivity average. They include the cost of plantation decay, which is non-cash unless you use it to cover a constant renovation program within the farm.<sup>5</sup> The constant erosion of productivity that Costa Rica has seen in the past is a reflection of farmers skipping this renovation, since their profitability did not allow for it, which in turn results of a vicious cycle of declining productivity and even lower productivity.

Based upon the above mentioned cost structure between fixed and variable, the following graph show how costs range from \$200 to slightly more than \$100 as the productivity shifts from 12 to 30 fanegas per Hectare, when one fanega of fruit produces approximately 46 kg of green coffee.<sup>6</sup>

<sup>4</sup> Source ICAFE

<sup>5</sup> In order to maintain productivity an average of 5% of the trees should be replaced every year

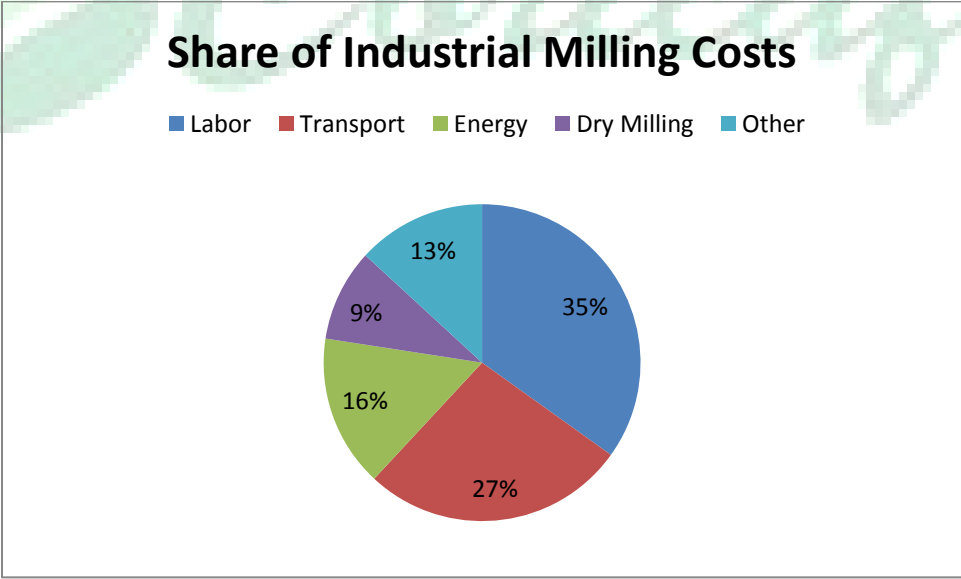
<sup>6</sup> Personal interviews with large estates effectively point out towards \$100 as the lowest possible cost in a large, highly productive plantation.



With the high percentage of the production grown by very small farmers (41%), with traditionally low productivity, it could be estimated that total cost of production for this segment ranges between \$200 and \$150, and it has been made possible only by the previously mentioned lack of proper renovation and the direct subsidy of production through family labor.

Milling expenses have also been under steady pressure. Both from the raise in labor costs (which account for 40% of the milling cost) and also impacted by the rise in oil prices, since mills pay for the transport of the cherry to the mill, of the pulp toward composting sites and green coffee to exporters warehouses.

The following chart show the distribution of the industrial milling costs for the 2010-11 crop, which totaled an average of \$24 per 46 kg of green coffee produced.

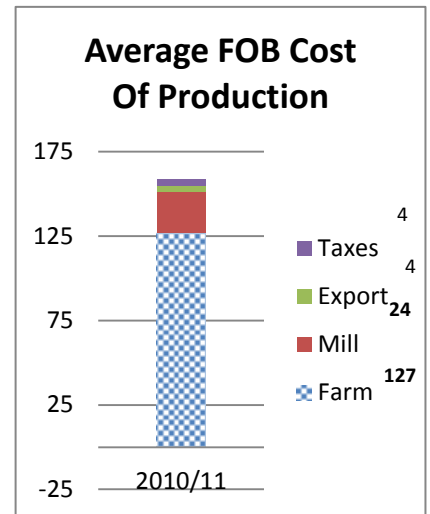


The big share that transport takes within the total costs, 27% or \$6.50/46 represents one source of significant economies to the micro mill, since the bulk of it is represented by moving the cherry to the mill, and then the waste out of it. Since the micromill is within the plantation these costs tend to 0.

To the costs incurred by producers and millers Taxes and Export Costs must be

added to arrive to the FOB Cost. Taxes include the 1.5% that must be paid to ICAFE on exports and \$1.25 to the coffee fund, export costs include Dry Milling Expenses for Blending, inland freight to the port and loading related expenses, which are estimated to be \$4/46.

Adding up all of the above Costa Rica's average direct cost of production is \$159/46 Kg. However in this figure there is no allowance for the administrative expenses of both millers and exporters, nor their margins, neither is an allowance made to cover their finance costs. Given that by law millers deduct 9% of the price they get, that implies that the average<sup>7</sup> FOB price must be at least 180 to allow enough to trickle down to the farmer to break even.



<sup>7</sup> Average price for all qualities, from low grades to premium

