

The Arbolivia Project

Social Impacts October 2014



A mutually beneficial partnership

The project's purpose is to prove a radical new way of tackling deforestation that has the social welfare of poor peasant farmers at its heart. The economic welfare of farmers and their families is the critical factor. Rather than just paying wages and perpetuating a model in which wealth is extracted overseas, the project seeks to enter a mutually beneficial partnership with profits being split equally.



Short term benefits

Farmers get both long and short term revenues since they are paid a small amount for maintaining each plot and receive extra plant material, inputs and technical advice that helps farmers to earn a better income from the rest of their farm. The project is already having a material benefit on the lives of farmers. Isidro Colque Condo (above left and right) was visibly wealthier on our return to see his plot after just 2 years. And his youngest child will be the chief beneficiary.



February 2011



July 2013

Additional income and benefits for farmers

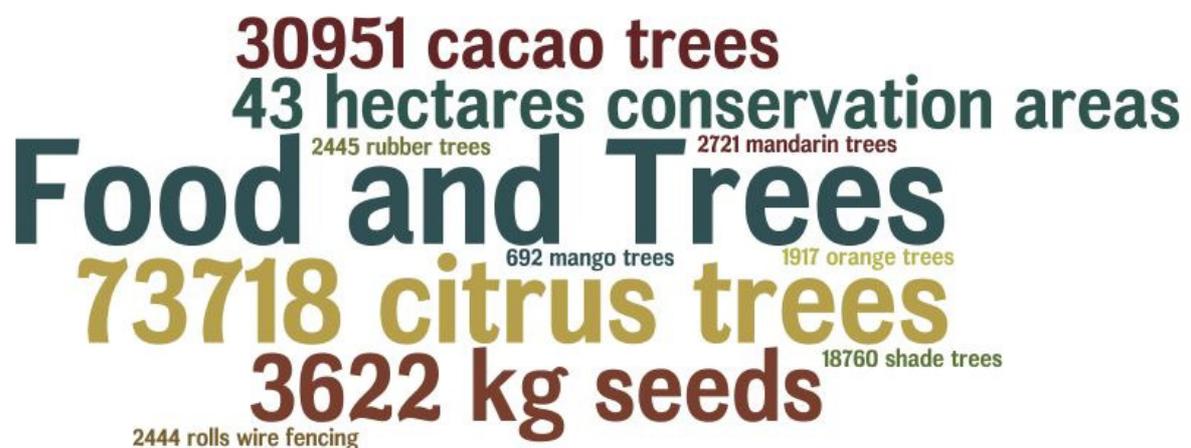
Since the average farm is around 30ha, farmers working on their own are unable to maximise the return from such a sizeable piece of land and trees are an *additional* source of income, especially when food crops are grown between the trees.

Farmers are also receiving a short term benefit in the form of wood that can be used for their own construction or for firewood. The first thinnings have no commercial value due to the costs of transportation, but some of the thinnings can be used by the farmers themselves.



Don Pedro (right) looks on as 5year old Palo Yugo is thinned. This sizeable tree has no commercial value but can be used by Don Pedro for his own building.

Since the start of the project, farmers have been supplied with other plants and inputs free of charge (see above) so that they can grow food and trees in the same area. They are also helped to create conservation areas in order that biodiversity is enhanced and plots are protected from flooding and erosion.



Farmers are given valuable plants free of charge

Sequestration of carbon

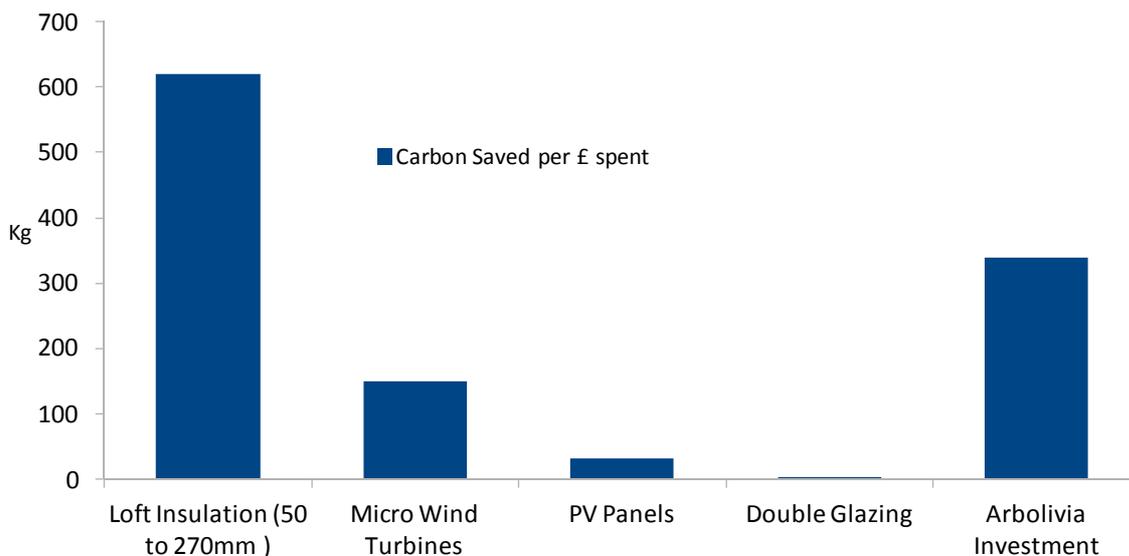
The key environmental benefit is the sequestration of carbon which directly counters climate change. We estimate that the project has already sequestered 162,000 tonnes of carbon and will absorb 621,000 tonnes of carbon over the lifetime of the project.



This includes an estimate for the conservation and agro-forestry areas and is higher than the verified 300,000 tonnes for 995 hectares of plantation forestry (this includes a 30% contingency allowance and only relates to a proportion of the planted area). It doesn't include the very significant potential saving of carbon which might otherwise be released on felling more trees, as is the likely scenario without the project's intervention. In any case, it is a significant amount of carbon, equivalent to that consumed by 606 average UK families over the lifetime of the project.¹

Trees grow quickly in the warm, humid environment of the Amazon. Even 'slow growing' trees grow much quicker than trees in a temperate climate, making them much more effective in sequestering carbon.

Pound for pound, investing in the project has been shown to be one of the most cost effective ways of mitigating carbon footprint.²



¹ Assumes 26 million households in UK, average carbon footprint of 25.6Tonnes a year, 40 year project.

² Small World Consulting, 'Comparing returns in Carbon Mitigation Investment Projects', November 2010

Wider ecological benefits

Importantly, this carbon sequestration is achieved through biodiverse plantations, not by creating a 'green desert' of identikit trees that are a sad replacement for the rich diversity of the rainforest. These monocultures of non-indigenous trees may grow quickly, but they do little for the natural environment. By way of contrast, the project works with 10 native species and teak (which is naturally suited to the area), building markets for the wood and maintaining seed stocks for the future.



The project creates biodiverse environments, not green deserts

Apart from the economic benefits, trees have an intrinsic ecological value and can be things of beauty. They also play an important role in preventing flooding by stabilising soils. This is one of the most important functions of the project's conservation areas. The value of this was underlined when the worst flood in living memory occurred in the Beni area in 2013.



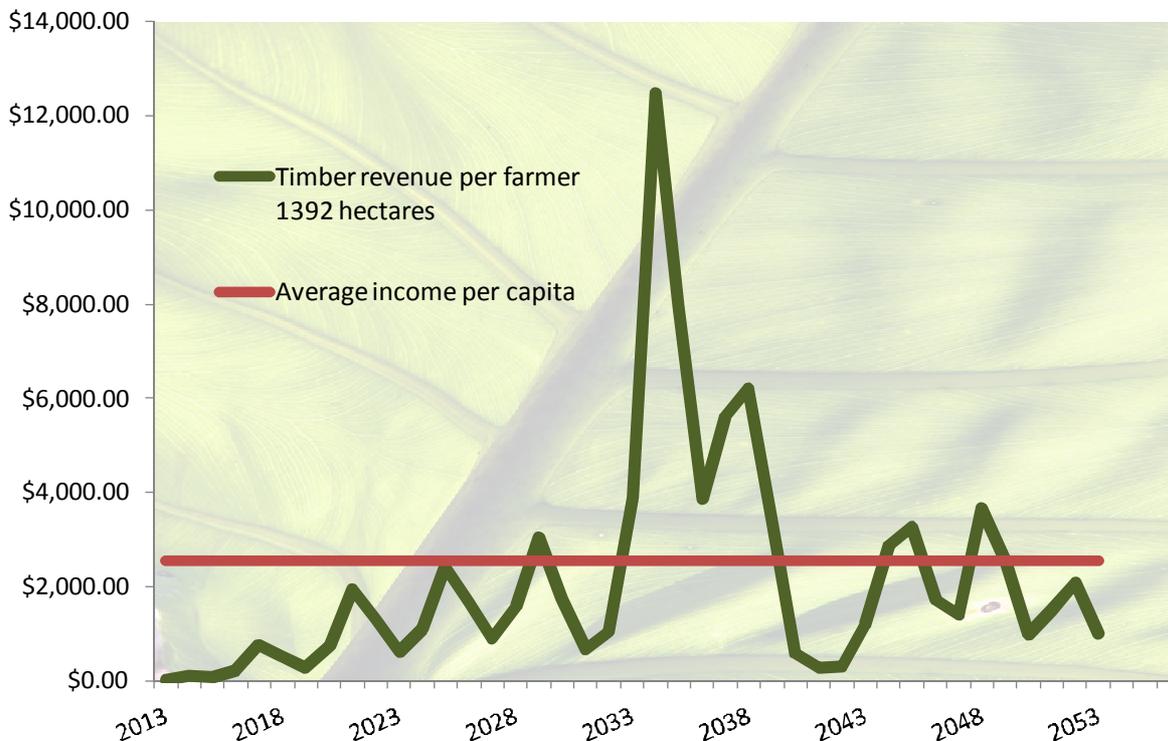
In 2013, the worst floods in living memory hit the Beni area. Although some farms were ruined, the project's trees helped to reduce the damage.

Left: The brown colour on the trees indicates the level of the floods.

Right: Palo Maria is grown by farmers where flooding is an issue, since it can tolerate standing water..

Trees move farmers out of a subsistence economy

However, the key benefit is the long-term income from an equal share of timber. This amounts to an average of \$87,000 per farmer over the lifetime of the project, a very significant amount in a country where the average income per capita was just over \$2,500 in 2013.

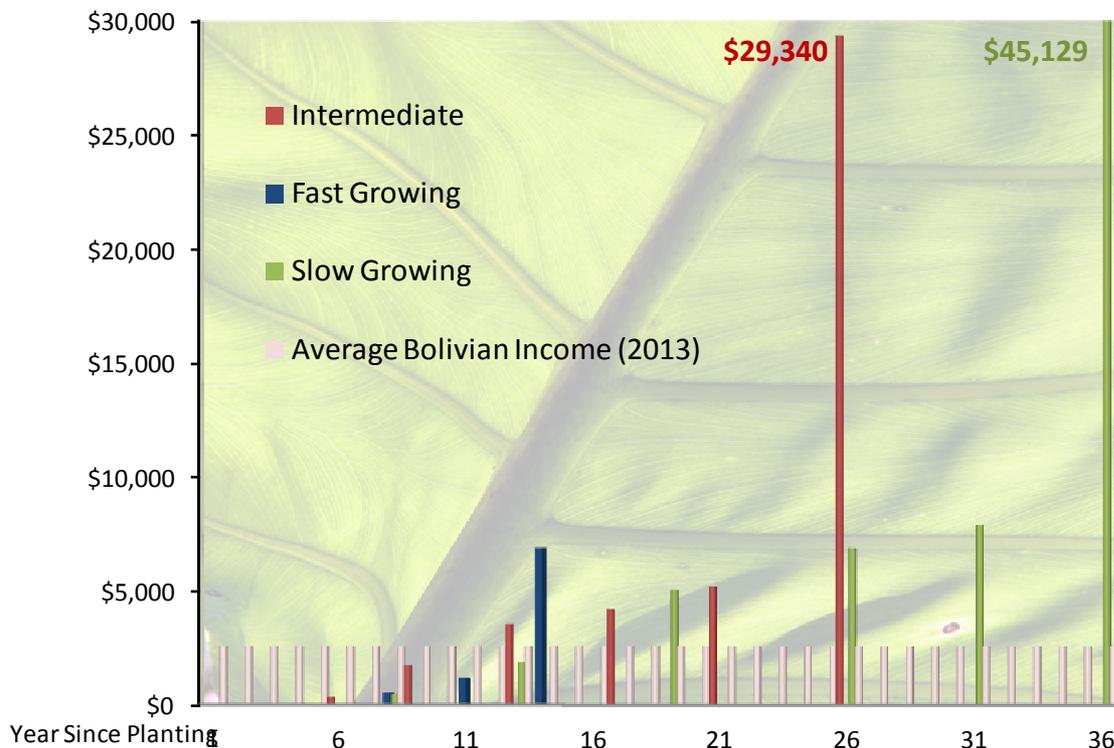


Trees are viewed as a long term asset that can be used to fund specific needs such as further education for children and grandchildren, or for unforeseen healthcare provision. The trees also provide collateral to secure microfinance loans.

Collateral for Microfinance
 Further Education for Grandchildren
Tree Bank
 Retirement Funding
 Emergency Healthcare
Cash

The farmers trees are a major extra source of cash in a subsistence economy

The actual income to the farmer, and when it comes, depends on the type of trees being grown. Although much of the income comes at the end when the plantation reaches maturity, there are significant incomes from thinnings.



Projected Timber income from 1 Hectare of Fast, Intermediate and Slow Growing Species

Better farming, more rainforest

The root cause of deforestation in the Bolivian Amazon is poverty. The project provides training and advice on the whole farm (not just the small amount relating to tree planting), which means that there is much less pressure on them to engage in further slash and burn agriculture involving the felling of prime rainforest. Given that the average farm size per engaged farmer is 30 hectares, the project directly influences more than 26,000 hectares of farmed land.

26000 Hectares Farmland Influenced

And it doesn't stop here. The project is influencing key decision makers in the forestry authorities in Bolivia, proving a sustainable model of plantation forestry that can replace the current unsustainable felling of prime rainforest. Furthermore, the project has a long waiting list of farmers wanting to join the scheme who are prevented from doing so by lack of funding. The farmers are clearly recommending the project to their neighbours and the project is starting to become a catalyst for change in the area.

What they say

The project is wholly dependent on the goodwill and hard work of the farmers, so one measure of success is what they think about it. Here's what some of them said:



Ezekiel Salvatierra Hurtado

“The wood is going to be more valuable because there is no more forest ... right now Arbolivia is leading this activity to get a fair price and we are like one association.”

– Ezekiel Salvatierra Hurtado

“These people who trust in us – we need to tell them that they can trust us because we are hard working. We want to re-assure investors that we are going to accomplish the contract.”

– Isidro Colque Condo

“I like the plantation. This is because I have children and I will have grandchildren. Something could happen any time – diseases, illnesses – but this will stay.” – Antonio Abrego

And our investors

14 of our existing investors have also been to visit the project and universally praised the project:

“The targeted farmers appear to genuinely need and appreciate our help and partnering ... you can see the project is making a difference to their lives” – JW

“It turned out to be a really inspiring trip. The level of support that the project gives to farmers is exceptional” – AS

“I found the whole visit extremely positive. I had never doubted that trees were growing, but it was good to see them looking so healthy and well tended” – AC

“We were very, very impressed” – CGJ



Investor meets farmer