## The green paradoxes of an Amazonian country

Balsa wood is an important input for windmills, and Ecuador is the world's largest exporter of this wood. The invasion of millions of wind turbines in China, Europe and the United States means the massive extraction of metals to build them, as well as the brutal felling of balsa wood trees.

## Balsa wood extraction in Ecuador for windmills

It was the first year since the start of the pandemic, and the balsa industry had been already installed for a few months in Ecuador. But the balsa fever had only just begun. When balsa tree plantations had been cut down, natural balsa tree populations in every corner of the country started to be affected. Their ultimate destination is China.

It all started when the Chinese government decided to eliminate taxes for the alternative energy industry. Balsa wood is an important input in wind power generator turbines, because it has great resistance and is the lightest of commercial woods—even lighter than cork wood.

Between January and November 2020, Ecuador's timber industry exports reached US \$784 million, which was 53% higher than in 2019. Almost 70% of Ecuadorian balsa wood exports go to wind energy in China, and balsa has become Ecuador's third largest export to the Chinese market, after shrimp and bananas. Ecuador is the largest balsa wood exporter in the world, accounting for 90% of the global market.

Although there are established balsa tree plantations, the extremely high Chinese demand has pushed balsa loggers to seek out natural sources, i.e. forests. Meanwhile, the balsa plantation frontier is expanding onto areas with natural vegetation and peasant farms, areas heretofore dedicated to local food sovereignty. This has increased deforestation not only of the balsa tree, but also of other woods that are sold illegally.

Roads and rivers in the Amazon are now filled with mobile sawmills that collect balsa trees and cut them into pieces of around 1.3 meters. Balsa logs are stacked one on top of the other to await the truck that will transport them to a logging company's collection center in the coastal region. Without a care as to where it comes from, these companies receive as much material as possible for export, and they package and ship it to China. Within the production chain, these companies are only responsible for receiving and later selling the product internationally, and they keep most of the economic profits. In this way, these companies are not held accountable at all for their role in the environmental and social impacts caused by this industry.

In the communities, workers earn minimum wage, if that. Most workers cut, stack and load logs. They are indigenous and poor peasants from the territories where balsa is extracted, and they earn 10 or 15 dollars a day. Many working men go to the city on weekends with their small earnings, and they spend it on alcohol. The women who cook for the workers feed their families with what they earn. Community dynamics have changed, and yet another situation of dependency has been introduced, affecting the autonomy of various Ecuadorian communities.

Intermediaries are external agents who do not represent, but respond to, logging companies. They are the ones who typically negotiate the logging of balsa with community leaders, offering to cover basic needs such as electricity, schools and even medical centers—rights that should be guaranteed by the State. Some leaders accept this, thinking about the needs of the people, without evaluating the problems they will face in the short and long term. Negotiations tend to be fast, as the intermediaries know what they want and how much they can offer; and leaders know what they need.

Conflicts within communities are, unfortunately, the order of the day. Fights between relatives—because the tree that was cut down was on the wrong side of the boundary—and accusations against community presidents for taking the balsa money are all a result of balsa logging. Timber extraction is breaking community ties and destroying cultural traditions. Community members spend all their time harvesting wood. They no longer attend assemblies, and they are abandoning the work of community social care.

Waste is dumped from sawmills into the rivers, and when the rivers flood they carry everything downstream. Rivers that used to transport just a few canoes between communities with people and food now look like traffic-laden streets in rush hour in Quito, the capital. The gasoline mixed with oil ends up in the water, affecting subsistence fishing; yet there are no consequences whatsoever for the traders.

Cutting down a large balsa tree affects ecosystems. Its canopy shelters plants that now dry up under the scorching sun of the equator. Birds that feed on balsa flowers no longer sing as they used to; parrots have now gone in search of new homes; *tapirs* and *sajinos* (wild boar of the jungle) are now exposed, leading to an increase in illegal hunting.

Stories like this are heard in practically every region of the country where there are tropical and subtropical forests. These areas include the Chocó forests, including the Andean Chocó; the few spots of natural forest that remain in various coastal regions; and the foothills of the mountain ridges. In eastern Manabí, balsa logging caused large landslides in an area that conserves one of the last tropical forests in the province, causing serious material damage in the community. Land for balsa tree planting is also being aggressively purchased, which is increasing both territorial capital gains (increase in economic value) and instability in living conditions.

Since wild balsa is being depleted in Ecuador, balsa loggers are venturing into the tropical forests of neighboring countries. Testimony from a member of social organizations from northern Esmeraldas tells us that balsa loggers bring wood from the Colombian Chocó through clandestine passages, passing through the country without going through any checkpoints until they reach Ecuadorian waters. They say that the timber enters the country by way of the Santiago river, one of the large rivers that flows into the Pacific; on this river, one can see outboard motorboats loaded with balsa logs. The boats first load up the logs in the neighboring country and then enter Ecuador, avoiding checkpoints until they reach the river where they supply different ports located provisionally along the river banks. Here they load trucks that transport the balsa to export companies at the main ports.

Similarly, Ecuadorian balsa loggers take wood from territories in the Morona River basin in the Amazonian rainforest of Loreto, Peru. This is affecting the Autonomous Territorial Government of the Wampís Nation and has caused intense conflicts. The Wampís Governor in Peru, Wrays Pérez (Pamuk Gtanw), confirmed this when he denounced that more than 1.5 million feet of balsa wood has been removed since January 2020 (1). More than a dozen sawmills are operating in the region along the Santiago River. Every day, more than 10 boats with a capacity of 20-40 tons carry illegal timber to the Ecuadorian border.

Traditional logging companies regret that they have not benefited from this balsa fever, and they have started to devise strategies to get into the business—such as expanding the area of balsa plantations and initiating negotiations directly with China.

## Meanwhile, what is going on in China?

Since the 2000s, China has seen an increase in energy consumption, which has kept pace with the accelerated industrialization of the country. Starting in 2010, China planned to shift its energy matrix towards energy generation from renewable sources, economically incentivizing the production of "alternative" energy with serious "collateral damage" in Amazonian countries. In 2020, in spite of the Covid-19 pandemic, China built more wind farms than the rest of the world combined, reaching a record number of installations that year.

The executive director himself of Ecuador's Wood Industry Association (AIMA, by its Spanish acronym), Christian Riofrío, admitted that: "It does not cease to be a paradox that clean energy generation is tied to pressure on the native Amazonian forest. When there is great demand and high prices, this fuels the black market" (2). For Riofrío, the problem lies in the illegality of the black market; but he completely ignores the social and environmental impacts caused by this industry.

What is ironic is that Chinese president Xi Jinping laid out new objectives in December 2020 that will be incorporated into his proposal for the Paris Agreement. China plans to reach peak emissions in 2030, and to have Net-Zero Emissions by 2060. To this end, it plans to increase the installed capacity of wind and solar energy to 1,200 GW by 2030. If this were only using wind power, China would need to build one million wind turbines. The concrete proposals to achieve these objectives will surely cause an even greater violation of the rights of people and nature, within China's own territory and beyond—as has already been verified with balsa logging in Ecuador.

While the growth of wind farms in China is exponential, the United States and Europe are not far behind. US president Joe Biden recently announced the deployment of 30 gigawatts of offshore wind energy (over marine territory) by 2030; meanwhile European Union countries announced they will reach 340 gigawatts of wind generation by 2030. General Electric remains the largest wind turbine manufacturer in the world, followed closely by China's Xinjiang Goldwind; meanwhile Danish company Vestas lags behind.

The invasion of millions of wind turbines in China, Europe and the United States will mean the massive extraction of metals in many parts of the world in order to manufacture them. It will also mean the brutal felling of balsa trees. What's more, we must remember that these apparatuses do not last more than 25 years, because their parts deteriorate over time. This means that before 2050, they will have to redo everything again.

## But there is also resistance

But not everything is for sale in the rainforest. There are communities that have opposed the entry of companies and intermediaries. They know that balsa wood is an essential part of the balance of the rainforest. To the Sapara Nation of Ecuador (NASE, by its Spanish acronym), the balsa tree is a natural protection against spirits that travel along the rivers, and it allows life to exist in the communities. Knowing this, they have cogently spoken out against the devastating intentions of the companies—companies which on several occasions have tried to convince leaders to promote balsa logging within their territory. Some Kichwa and Achuar communities in the Southern Ecuadorian Amazon also hold a similar vision of balsa.

Once again, a power claiming to be generating clean energy is stealing the scaffolding of this small Amazonian country's forests. These paradoxes of the so-called "green economy" ruin the natural stability of the forests and the jungle.

Acción Ecológica, Ecuador <a href="https://www.accionecologica.org/">https://www.accionecologica.org/</a>

(1) Video from the Autonomous Territorial Government of the Wampís Nation, shared on social media in May 2021

(2) Accessed 11 June 2021 here