



NACLA Report on the Americas

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/rnac20>

Promoting Forest-Friendly Exports in the Brazilian Amazon

From fruit and coffee to tropical fish, the Amazon is home to a diversity of products with the potential to be sustainably produced for a global market. How can Brazil level up?

Salo Coslovsky

To cite this article: Salo Coslovsky (2023) Promoting Forest-Friendly Exports in the Brazilian Amazon, NACLA Report on the Americas, 55:2, 169-175, DOI: [10.1080/10714839.2023.2213093](https://doi.org/10.1080/10714839.2023.2213093)

To link to this article: <https://doi.org/10.1080/10714839.2023.2213093>



Published online: 24 May 2023.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)



Brazil nut tree (ALEXANDRE MARTINS PEREIRA / CC BY-SA 4.0)

SALO COSLOVSKY

Promoting Forest-Friendly Exports in the Brazilian Amazon

From fruit and coffee to tropical fish, the Amazon is home to a diversity of products with the potential to be sustainably produced for a global market. How can Brazil level up?

In mid-January 2023, I drove to New Jersey to visit one of the largest warehouses licensed to store cocoa beans in the East Coast of the United States. As the manager showed me around, he explained that beans from Ghana arrive in thick jute bags, neatly stacked inside spotless 40-foot containers, each bag labeled with a tracking number that connects it to its farm. Conversely, Bolivian cocoa arrives in bags made of shiny plastic fibers, sealed airtight to keep the cargo fresh and free of contaminants. Walking

around the facility, I saw cocoa from Nigeria, Venezuela, Ecuador, Peru, and Papua New Guinea.

The building was spacious and surprisingly clean. Still, a peculiar smell permeated the air. “Some people say it smells like money,” the manager said with a smile on his face. Indeed, the 20,000 tons of cocoa that this U.S.-based company had in storage would eventually be sold to chocolate makers for more than \$50 million. Not a single cocoa bag in that entire warehouse was from Brazil, one of the seven largest cocoa producers in the world.

I have not visited warehouses that store black pepper, hearts of palm, fresh mangoes, Brazil nuts or other forest-friendly products. But if I had, the experience would have been pretty much the same. Even though Brazil accounts for about a third of all tropical forests, its share in the relevant global markets barely reaches a fraction of one percent.

If economies were machines, the Brazilian Amazon would be a clunker. Thanks to rampant deforestation, the region emits more greenhouse gases per capita than any country in the world, including advanced industrial nations like Germany and the United States. And yet, all this deforestation produces limited economic gain: the Brazilian Amazon makes such poor use of its resources that its GDP per capita falls somewhere between Iran's and Iraq's. How can such an economy be invigorated?

Many influential Brazilian leaders still see the continued existence of the tropical forest and its guardians as an obstacle to economic development. By and large, they associate serious economic development with mining, cattle ranching, soy farming, and road building. At the same time, they dismiss forest-friendly activities as a complement to social assistance programs. This is a gross failure of imagination. As I argue in my research, the production and export of forest-friendly products can be a powerful engine of economic growth.

Contending with the Amazon's Wasted Potential

The Amazon is the largest tropical rainforest in the world, and about two-thirds of its territory is in Brazil. Since the mid-1950s, Brazilian law has delineated an area, known as the "legally defined Amazon," that includes the entirety of its Amazon biome plus some areas of savanna (Cerrado) and swamplands (Pantanal). This broader region of the Brazilian Amazon, home to about 28 million people, covers 59 percent of the national territory and is equivalent to 1.5 times the size of India. In addition to being huge, the Brazilian Amazon is quite poor.

Its GDP per capita would have to be bumped up by almost 60 percent to match the rest of the country.

Counter intuitively, the region's economic hardship is not caused by a scarcity of resources, but by misallocation, inefficiency, and waste. Brazil has already deforested 21 percent of its legally defined Amazon, an area close to the size of Texas and Louisiana combined. Out of all this land, an eye-popping 63 percent has been abandoned or remains underused, devoted to low-productivity cattle ranching.

The same pattern of wasted potential extends to people. The population of the Brazilian Amazon includes a larger share of working-age adults than the rest of the country. In theory, this demographic profile should yield an economic bonus. In practice, it constitutes a drag, as close to eight million potential workers neither work nor attend school.

Current debates concerning the economic development of the Brazilian Amazon revolve around three main strategies. The first one, often favored by urban elites in Brazil and abroad, relies on the production and sale of carbon credits. A growing set of businesses and foreign governments have pledged to decrease or eliminate their greenhouse gas emissions in the next few decades. To accomplish this goal, they are updating some of their practices, for instance by relying on solar or wind energy instead of fossil fuels. Many of these organizations are also willing to pay outsourced providers to capture and store carbon, and the Amazon is vying to become a leading provider of this service.

The second strategy pertains to the collection of royalties over valuable biochemical compounds that might be discovered in the forest. The biodiversity of the Amazon is staggering, and some global entrepreneurs believe that the region may be a cornucopia of miracle foods, wondrous drugs, and healthy supplements. Several experts go a step further and argue that Indigenous people already maintain much of this knowledge, so the challenge is to cash in, and to do so in an equitable way.

The third strategy, particularly favored by people who live in the Brazilian Amazon, entails the

acquisition of factories so businesses located in the region can start selling finished products such as cosmetics, packaged foods, jewelry, medicines, and furniture instead of selling plant extracts, fibers, seeds, fruit purees, timber, and oils.

All these strategies deserve some attention, but they might not be as promising as they seem. An alarming number of initiatives that purport to generate carbon credits have been based on fraudulent claims or involve shady deals that disenfranchise Indigenous people. The pharmaceutical industry is notoriously risky, with high barriers to entry. On average, it costs \$2.6 billion to develop a new drug for the U.S. market, and many new drugs don't make enough money to recoup this investment in a reasonable time frame. Finally, the production of consumer goods is alluring, but it forces Amazonian businesses to compete against powerful multinationals on their home turf. Most importantly, the emphasis on these three strategies obscures a fourth possibility that could deliver more pragmatic and perhaps bigger and faster results: the export of forest-friendly products.

A Global Market for Fruit, Fish, and Other Forest Products

Forest-friendly products are raw or minimally processed goods that are typical of tropical regions and can act as drivers of environmental conservation, forest regeneration, the restoration of degraded lands, and the economic inclusion of forest dwellers. In the Brazilian Amazon, forest-friendly products fall into four categories: non-timber forest products, such as Brazil nuts and wild-harvested açai; crops that can be cultivated in agroforestry systems, such as cocoa, black pepper, oil palms, and robusta coffee; tropical fish and other seafood, either from fresh water or the Atlantic coast, either farmed or wild caught; and tropical fruit such as mangoes, guavas, melons, bananas, and dragon fruit.

It is important to note that the name “forest-friendly” is not an assurance of green bona fides but the indication of a possibility. Any for-profit activity, when done carelessly or maliciously, can be detrimental to the environment, workers, and surrounding communities. This means that forest-friendly activities do not replace vigorous enforcement of environmental and other protective regulations. Instead, proper enforcement is a prerequisite for forest-friendly economic activities to thrive.

Brazil is a large and fairly closed economy, so many Brazilians wonder why they should focus on exports when the domestic market seems ripe for the taking. The emphasis on exports is relevant for three reasons. First, exports are a litmus test of business skill. It is fairly easy to sell a product locally, and not too difficult to sell nationally. But only the best can succeed in foreign markets, where quality standards are high and competition is fierce. Second, export markets tend to be exceedingly large and dynamic, with multiple evolving segments. As such, they create plenty of opportunities for growth. And third, the act of exporting can be an escalator of competence. Firms that export gain firsthand knowledge of budding market trends, new technologies, and novel business opportunities. Further, firms that export can establish mutually beneficial relationships with their customers to upgrade their product lines and move up the value chain.

As my research indicates, enterprises based in the Brazilian Amazon already export 60 forest-friendly products, and this trade brings them an average of \$300 million per year. This might seem like a rounding error when compared to all exports that originate in the Brazilian Amazon, especially iron ore and soy. Still, it affirms that forest-friendly enterprises

The export of forest-friendly products can be a big, knowledge-intensive business, and producers based in the Brazilian Amazon are not taking advantage of it.

based in that region are viable and can compete successfully in the global marketplace. Even more importantly, the upside remains quite large, as the global market for these same 60 forest-friendly products is estimated at \$180 billion per year.

Some products, such as cocoa beans, palm oil, and coffee constitute multibillion-dollar markets on their own. Other products, such as black pepper, cloves, ginseng, and ornamental fish might seem minor, but they also generate a few billion or at least hundreds of millions of dollars each. The export of forest-friendly products can be a big, knowledge-intensive business, and producers based in the Brazilian Amazon are not taking advantage of it.

Learning From Bolivia's Brazil Nut Success

If markets are so large, why are forest-friendly businesses based in the Brazilian Amazon so small, and how can they grow?

The most prevalent answer points to region-wide problems such as an inadequate transportation network, low quality education, insufficient internet

connectivity, and underfunded government agencies. These problems are serious and hard to fix, at least in the short run. The good news is that they might not be as critical for success as they seem. After all, the leading exporters of forest-friendly products are not high-income powerhouses such as France or Japan, or models of good governance such as Denmark or New Zealand, but other tropical countries that face similar or perhaps even worse conditions than those experienced in Brazil and its Amazon.

For example, the leading exporter of Brazil nuts is Bolivia; the leading exporter of black pepper is Vietnam; and the leading exporter of fresh pineapples is Costa Rica. The first is landlocked and bisected by the Andes, the second operates under a single-party socialist regime, and the third is not only smaller than each of the nine states that comprise the Brazilian Amazon, but it is also smaller than 16 of its municipalities. Their experiences suggest that superb market performance depends not so much on the presence or absence of certain region-wide attributes, but rather on how existing resources are mobilized.

Boats loaded with Brazil nuts at the banks of an Amazonian riverside community. (JESSICA KAROLINE ALVES PORTUGAL / CC BY-SA 4.0)



To better understand this mobilization process, I examined how Bolivian producers dominated the global market for Brazil nuts. Brazil nuts are the seeds of the *Bertholetia excelsa*, a tree native to the Amazon Basin and that has not been domesticated. To this day, the bulk of Brazil nuts consumed in the world are harvested in the wild, in an area that encompasses parts of Brazil, Peru, and Bolivia. For centuries, Brazil was the leading supplier. Not anymore. At present, Bolivian producers retain a market share of 74 percent while their Brazilian counterparts cling to a paltry 11 percent.

This reversal of fortune can be traced to the late 1990s, when the European Union, which imports half of all Brazil nuts consumed in the world, tightened its food safety regulations pertaining to aflatoxins. Aflatoxins are a carcinogenic substance produced by a fungus that grows in many agricultural products. At first, neither Brazilian nor Bolivian producers knew how to meet the strict EU regulations. The Brazilians, uncertain about what to do, kept on sending contaminated shipments to the EU until they got banned from that market altogether.

Meanwhile, in Bolivia, the national government and private producers took a series of farsighted decisions that allowed them to meet EU standards and retain access to that lucrative market. To start, the Bolivian government enforced a new regulation requiring that all shipments destined for export be tested for aflatoxins before they could leave the country.

Faced with this requirement, a leading Bolivian firm obtained financing to build its own lab, but it soon realized that operating an in-house lab would be too expensive even for a fairly large enterprise. Instead, it transferred the lab to its moribund Brazil nut producers' association in exchange for unpaid dues. Finally, in a stroke of genius, the association offered lab services to all Brazil nut producers in the region. The scale made the service affordable to all, and the association then used the profits from this operation to provide a set of critical "narrow public goods" to its members.

Narrow public goods are resources that improve the competitiveness of all producers in a sector ("public") but have limited use to producers in other sectors ("narrow"). Narrow public goods can include research on the characteristics of a product and its processing techniques, collection and dissemination of sector-specific statistics, regulations and associated enforcement for the prevention (or cure) of plant diseases, and the fostering of a good reputation for a product or region. In the case of Bolivian Brazil nut producers, their most critical narrow public good consisted of technical assistance so they could upgrade their manufacturing practices, improve their facilities, and meet EU standards.

While firms that surround themselves with much-needed narrow public goods find it easier to thrive, firms with limited access to these resources have to work twice as hard to get by. This point became clear after my coauthors and I interviewed about 30 entrepreneurs devoted to buying, processing, and selling foods from the Brazilian Amazon. We selected these interviewees based on their prominence and apparent success. Similar to entrepreneurs everywhere, they devoted enormous effort to raising capital, establishing commercial relations with suppliers, hiring and retaining employees, acquiring a reliable clientele, and building a brand.

But, different from their peers, many of them performed double duty. In addition to the conventional tasks performed by all entrepreneurs, they devoted enormous effort to supplying the narrow public goods that their sectors needed to prosper. One firm hired food scientists to find out the nutritional content and shelf-life of tucupí, a broth made of cassava that it wanted to bottle and sell throughout the country. Another firm was trying to devise sensors and verification protocols so it could attest the quality of açaí puree before the cargo was shipped to demanding clients in Europe. And yet another firm was teaching consumers in São Paulo how to cook with Amazonian ingredients that are not widely used in that part of the country.

It is always difficult to nurture a start-up towards financial stability, even when circumstances are favorable. But when a nascent enterprise is bogged down with the additional burden of providing narrow public goods, its chances of success plummet.

Grappling with Obstacles

When it comes to promoting forest-friendly exports from the Brazilian Amazon, it seems like the obvious way forward would be for someone to provide narrow public goods, tailored to each sector and well adapted to its immediate needs. This would be a good start, but it is not easy to do.

Private sector businesses would have the most to gain, but they rarely join forces with their competitors for the common good. Time and again, business leaders have different resources at their disposal, see the world from different angles, and favor different courses of action. Even when they seem eager to collaborate with their peers, many entrepreneurs see an attempt at collective action as a way to advance their own individual interests. Once, I interviewed the owner of a large Brazil nut processing plant in Brazil. He had recently become the head of their national association. He told me how the association had started lobbying the national government to mandate that all Brazil nut producers obtain a demanding third-party certification before they are allowed to export. It was, he explained, a push for improved food safety in the sector. “Actually,” he then confided, lowering his voice, “I am the only one who has this certificate.” Naturally, the other members objected, and the association collapsed soon afterwards.

And even if competitors manage to agree on a shared strategy, they often confirm Adam Smith’s prediction that “people of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.” What this means is that producers often ask for exemptions, subsidies, or some form of protection from market competition.



Açaí (CAMILA NEVES RODRIGUES DA SILVA / CC BY-SA 4.0)

Over the past year, I have been studying the cocoa sector in Brazil. At an early discussion, producers identified more than a dozen different strategies to improve their economic performance. This initial list was quite eclectic, including everything from crafting fine chocolate to increasing agricultural productivity. As the discussion progressed, producers narrowed the list down to four burden-relieving measures: they wanted to convince government authorities to ban cocoa imports from West Africa, mandate that Brazilian chocolate-makers use more cocoa in their formulations instead of other ingredients, guarantee a minimum price for cocoa beans, and include cocoa-based products in school lunches and army rations. From their perspective, these priorities made total sense. After all, these measures would please all firms in the sector, independent of their size, expertise, ambition, or level of sophistication. As a bonus, they would not require investment on producers’ part and would not impose any risk. Their fatal flaw is that protection breeds apathy and hinders innovation.

The government seems to be the obvious alternative. Indeed, Brazilian public bureaucracies already offer a variety of services that can help forest-friendly industries succeed. These services include agricultural research, workforce training, export promotion, and affordable financing. But, for the most part, these government agencies do it

according to their own priorities and performance metrics. Large enterprises inevitably find a way to take advantage of these offerings. Smaller firms and those without a robust business association to lobby on their behalf, however, often face myriad obstacles to obtaining the support they need.

Toward a Forest-Friendly Future

While these obstacles should not be underestimated, the right policies can make a notable difference. Peru offers an inspiring example. In 2014, Peru's newly appointed Minister of Production Piero Ghezzi devised an innovative administrative effort, called "*Mesas Ejecutivas*" (Executive Roundtables), where public and private sector leaders worked together to boost the economic performance of important sectors.

Three aspects of the Executive Roundtables were key to their success. First, the government hosted one "table" per sector and each one had a two-part structure, with private-sector managers on one side and a small team of experienced public servants on the other. Second, the tables were not meant to be representative of each sector or include all actors along the relevant supply chain. Rather, private-sector participants were hand-picked to participate based on their experience working in the chosen sector, the similarity of their conditions to that of their peers, and their in-depth knowledge of the challenges they all face. Participants were also frustrated with the status quo and eager to reach a working consensus on the key problems that were preventing their firms from getting stronger, faster.

Third, a small team of public servants presided over the biweekly meetings to keep the discussions on track and to reject requests for subsidies, exemptions, or protectionism. Their main duty was to draw from their knowledge of government operations to find solutions to the problems identified by the private-sector participants. To do so, they relied on a modicum of legal, political, or financial power to convince or cajole other agents, public and private, to adjust their respective policies and programs.

Peru began the initiative with one Executive Roundtable dedicated to forestry, and soon added another dedicated to fish-farming. Several more were created in subsequent years. As can be expected, not all of them delivered the hoped-for results. Still, the roundtables have been successful enough to survive six presidents and 15 ministers of production. In another testament to their effectiveness, the Chilean government has recently embraced the idea and created several roundtables of its own.

This administrative effort provides the ideal template for policymakers in Brazil interested in promoting the export of forest-friendly products. Through Executive Roundtables, private-sector participants can identify the key narrow public goods that they lack, and a cohesive team of public officials can search for ways to provide them. Success is not assured, but the frequent meetings create urgency and keep everyone accountable.

In his inaugural address, Brazilian President Luiz Inácio Lula da Silva reaffirmed his commitment to strengthening the forest-based economy in the Amazon. The country has plenty of experienced career public servants that could set up and operate the roundtables. Above all, Brazil's export promotion agency, known as ApexBrasil, has the budget, the financial autonomy, the administrative capacity, and the legal mandate to host such an initiative. Even more propitiously, its newly appointed president Jorge Viana hails from Acre, a state in the Brazilian Amazon that borders both Bolivia and Peru and pioneered policies to strengthen its forest-friendly economy. The time and conditions are right for Brazil to initiate its own type of roundtables, which could elevate the various forest-friendly sectors and, through them, secure a green future for the Amazon. ■

Salo Coslovsky is Associate Professor of Urban Planning and Public Service at the Robert F. Wagner School of Public Service, New York University, and an affiliated researcher with *Amazonia 2030*, a research project based in Brazil.