

COUNCIL *on* FOREIGN RELATIONS

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INSIGHTS FROM A CFR WORKSHOP

Reducing Deforestation to Fight Climate Change

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*In July 2015 the Council on Foreign Relations' (CFR) Maurice R. Greenberg Center for Geoeconomic Studies held a workshop on avoiding deforestation in order to mitigate climate change, with a special focus on Brazil. The workshop was hosted by CFR Senior Fellow Michael Levi. The views described here are those of workshop participants only and are not CFR positions. **The Council on Foreign Relations takes no institutional positions on issues and is not affiliated with the U.S. government.** In addition, the suggested policy prescriptions are the views of individual participants and do not necessarily represent a consensus of the attending members.*

INTRODUCTION

Deforestation is a major man-made source of greenhouse gas emissions, and is especially significant in countries with large tropical forests, including Brazil and Indonesia as well as countries in Central Africa, like the Democratic Republic of Congo. Forests naturally act as a storage unit, or “sink,” for carbon emissions into the atmosphere, absorbing about one-third of the carbon dioxide emitted by cars, power plants, and factories every year. But forests, when cut down, are also a source of emissions as they release the carbon stored in their leaves, trunks, and roots into the atmosphere. In recent years, many policymakers have come to see reductions in deforestation (or “avoided deforestation”) as a potentially low-cost way to curb greenhouse gas emissions. To achieve these reductions, they have pursued a range of approaches, from tougher local and national legislation prohibiting the destruction of forests to financial incentives for protecting them. Yet there is widespread agreement among analysts that the full hoped-for potential of avoided deforestation has not been realized.

CFR hosted a workshop designed to draw lessons from Brazil’s recent success at limiting deforestation, understand why countries such as Indonesia have so far struggled, and identify ways to further reduce deforestation. The workshop, involving roughly two dozen participants including corporate decision-makers, economists, scientists, nongovernmental organization (NGO) leaders, investors, and current and former policymakers, set out to unpack the roles played by government policy, civil society pressure, technology, and private sector initiatives in countering deforestation with a view to understanding how best to limit it in the future.

BRAZIL’S BIG TURNAROUND

In recent decades, as Brazil expanded its agricultural sector, clear-cutting of huge sections of the Amazonian rain forest to create farmland for the cultivation of cash crops such as soybeans or pastureland for beef cattle became a large problem. By 2003, Brazil was cutting down about 2.7 million hectares of tropical forest per year (slightly greater than the size of Maryland); deforestation then accounted for roughly three-quarters of Brazil’s greenhouse gas emissions. Ten years later, tropical deforestation in Brazil had declined dramatically to about 500,000 hectares annually (though deforestation in other areas remains stubbornly high). Participants sought to understand why.

Most participants agreed that the shift is due largely to increased government effort to crack down on illegal tropical deforestation through satellite monitoring and aggressive prosecutions. At the same time, the link between economic development and deforestation was greatly weakened thanks to a pair of voluntary moratoria: buyers of soybeans swore off products grown on illegally cleared land in 2006, and buyers of beef followed suit in 2009. Technology and agricultural intensification also played an essential enabling role. Participants noted that, as farmers became more efficient producers, they had less need to clear land to maintain yields. Soy production actually increased even as deforestation declined.

Deforestation today accounts for less than half of Brazil’s total greenhouse gas emissions, due to the decline in clear-cut acreage but also to the growth of other emissions sources, particularly the

energy sector. Importantly, deforestation has sharply declined even as Brazil's overall economy, and especially agricultural income, has continued to grow.

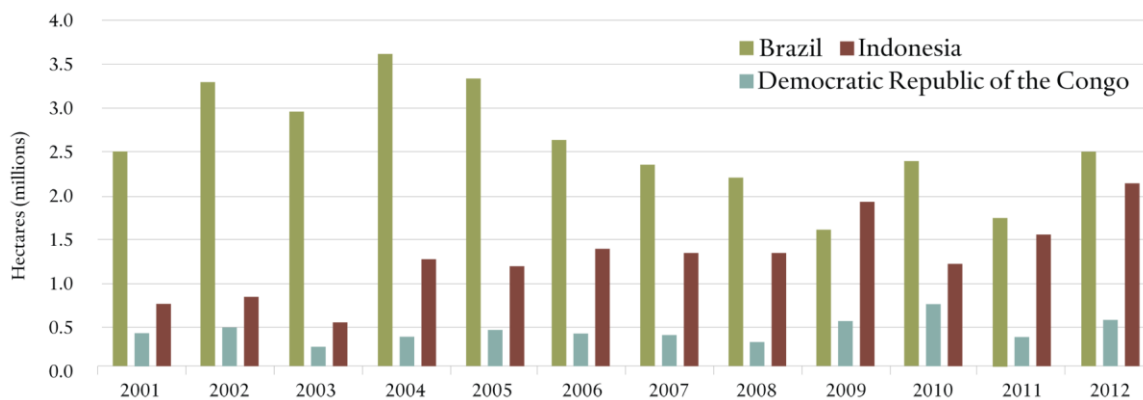
Laws and Their Limits: Comparing Brazil and Indonesia

Brazil and Indonesia have both sought to curb deforestation. Norway has provided \$1 billion to each to support forest protection schemes. Yet only in Brazil has significant, if fragile, progress been made. Why? Participants grappled with this puzzle to try to identify factors that make preventing deforestation possible.

Debate quickly focused on governance. Some participants pointed to Indonesia's diffuse government as the cause of its weak performance, with more than thirty ministries involved in forestry issues, as well as the country's decentralized government split among national, provincial, and district-level administrations. That has made it harder to impose uniform standards, for instance, on forest tracts in different areas of the country. But others pointed out that Brazil, too, has scores of ministries involved in forest issues and Indonesia's diffuse structure isn't always harmful. Local efforts have been seen both to undermine and improve on national-level initiatives, depending on the capacity of sub-national governments to protect forests and their economic interests in doing so. The workshop's discussion thus shifted to two other potential explanations.

Brazil began to take deforestation seriously several years ago, unlike Indonesia, and created the conditions in which the Norwegian financing could be used to maximum effect right away. It implemented stronger regulations through its 2004 action plan targeting illegal deforestation, boosting oversight by public officials and encouraging zealous enforcement by prosecutors (figure 1). Deforestation rates had already begun dropping by the time Brazil and Norway signed the billion-dollar agreement in 2008. "Brazil had the result before the \$1 billion; in Indonesia it was the exact opposite," one participant said.

FIGURE 1. FOREST COVER LOSS IN BRAZIL, INDONESIA, AND THE DEMOCRATIC REPUBLIC OF THE CONGO



Source: M.C. Hansen et al., University of Maryland. Data available at globalforestwatch.org. Bars indicate areas that have lost 50 percent or more of their forests that year.

Participants also zeroed in on the economic drivers of deforestation, which are also different in the two countries. Logging is lucrative in Indonesia, where nearly every tree is commercially valuable; in Brazil, said one participant, only six or seven trees out of a thousand felled are commercially

valuable, which greatly reduces the economic incentives for illegal logging. Similarly, the economic returns from Brazilian pastureland are lower than the returns from Indonesian palm oil plantations. Those economic factors, agreed participants, coming on top of a diffuse, sometimes corrupt, and technically deficient government, have made it all the more difficult for Indonesia to arrest deforestation the same way that Brazil has in the last few years.

To supplement the uneven performance of the legal system in various countries, national governments and international donors have also offered financial incentives to protect forested areas or discourage further deforestation, under a broad umbrella of policies known as Reducing Emissions from Deforestation and Degradation (see “What is REDD+, Anyway?”). Over the past decade, these efforts to harness economics for forest protection have increasingly become part of plans to combat climate change, though hopes that they would provide low-cost, effective ways of curbing forest destruction, participants noted, have not been fulfilled. They have also not been without controversy. Participants highlighted the views of critics, including Pope Francis, that it is immoral for rich, polluting countries to pay less developed countries to keep their forests intact so that the rich countries can avoid having to take painful steps to transform their own economies.

What is REDD+, Anyway?

Reducing Emissions from Deforestation and Forest Degradation (REDD) has become a prominent focus of international policy discussions over the last decade. The idea is to put a dollar sign on forests for the role they play as global carbon sinks, encouraging mainly developing countries to preserve, sustainably manage, or restore their forests. There are two main ways to finance REDD+ initiatives: direct payments to nations to reduce deforestation, and the trading of forest “credits” on carbon markets.

Countries such as Norway, as well as international organizations such as the World Bank, have sought to implement payment-for-performance schemes in Latin America, Asia, and Africa. Those programs offer financial and technical support to recipient countries to bolster their ability to protect forests. Alternatively, state and regional carbon markets that use a cap-and-trade scheme, such as California's, have studied the inclusion of tropical forest “offsets” that could be traded to meet emissions-reductions requirements. Forest protection can be converted into a “credit” that can be monetized on carbon markets by packaging for sale each ton of carbon emissions that is avoided by preserving forests. Carbon market participants can use these credits to “offset” emissions they generate through other activities.

LEVERAGING CORPORATE POWER

Activists and corporations have argued that the private sector, and especially multinational corporations, can play a major role in discouraging deforestation by using the reach and weight of their long supply chains to drive changes in behavior among smaller producers. Companies that buy huge amounts of raw materials are often in a position to dictate how those materials are grown, sourced, made, and packaged, which can force changes in how their producers do business.

Several participants noted that pressure for such changes has come largely from civil society—including high-profile campaigns by environmental groups in forested tropical countries—meaning that the motivation for corporate action has often been to ameliorate the reputational risk of being seen to damage vulnerable forests. Nonetheless, private sector moratoria on beef and soy-related deforestation have been influential in protecting the

Brazilian Amazon, as has a similar worldwide initiative on palm oil. Participants acknowledged the successes of the private sector to date, though some also argued that, in the absence of well-enforced deforestation laws, the evidence that private sector initiatives alone could be decisive was inconclusive.

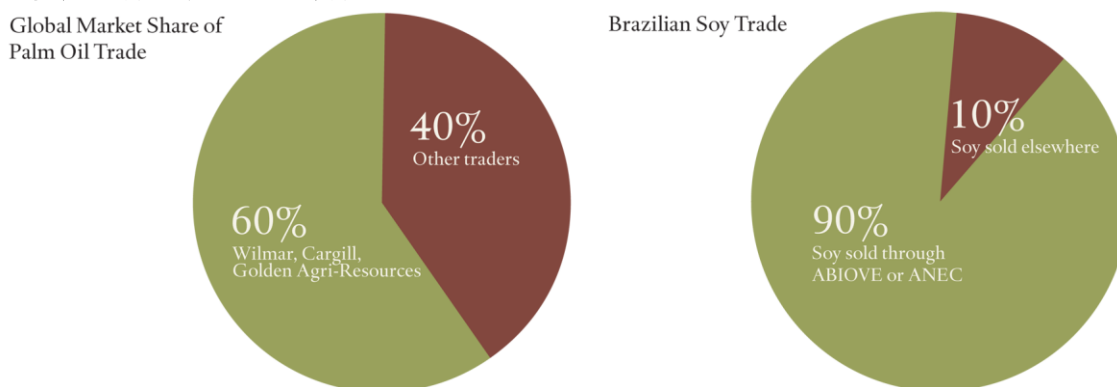
Private sector aspirations to create sustainable operations can build momentum and space for further government policies to protect forests, helping create a virtuous circle.

Nonetheless, participants agreed, as companies commit to more ambitious environmental goals, they have also become more willing to advocate for government policies that will support their own endeavors. Thus, private sector aspirations to create sustainable operations can build space for further government policies to protect forests, helping create a virtuous circle.

Private Sector Success Stories

Some multinational corporations have taken steps in recent years to make their supply chains more sustainable—but, participants notes, only when and where that can be done with no damage to the corporate bottom line. Participants noted steps taken in the beef industry to ensure that cattle are not raised on illegally deforested land, but they focused more on the marked transformation in soy. The two leading soy export associations—Associação Brasileira Indústrias Óleos Vegetais (ABIOVE) and Associação Nacional de Educação Católica do Brasil (ANEC)—account for some 90 percent of Brazil’s soy exports (figure 2). When they committed to ensuring that their exports would not come from illegally deforested land, they had an enormous effect on the market.

FIGURE 2. CONCENTRATED INDUSTRIES ENABLED MEANINGFUL PRIVATE INITIATIVES



Source: Climate and Land Use Alliance; Associação Brasileira Indústrias Óleos Vegetais

In Indonesia, civil society pressure and corporate action have likewise helped transform the sustainability of the palm oil industry—a huge source of Indonesian deforestation—in a few short years. One participant noted that in 2013, shortly after the first multinational firms began voluntarily to commit to more responsible sourcing, only about 5 percent of palm oil was sustainably produced; by 2015, that had increased to between 60 percent and 90 percent, depending on how it is measured. Market concentration was also instrumental here. Just three companies—Wilmar International, Golden Agri-Resources, Inc., and Cargill—control some 60 percent of the global trade in palm oil. These voluntary corporate pledges to eschew palm oil from deforested areas, argued some participants, created powerful incentives for producers to fall in line, resulting in a “race to the top”: more participating producers meant there would be a critical mass of available palm oil supply, enabling other corporate palm users to also pledge to meet more stringent environmental criteria. Still, other participants added, additional corporate participation would undoubtedly be contingent on the availability of not just certified but also affordable palm oil.

Limits to Corporate Initiatives

Participants noted a number of other challenges for corporate initiatives. In Brazil, it’s the smallest scale producers who now collectively account for a large amount of deforestation. Largely isolated from the global marketplace, and relying on small-scale and inefficient farming and ranching operations, they do disproportionate harm to forests. While some participants expressed frustration at this persistent source of deforestation, others sounded a more hopeful note, arguing that by increasing productivity and yields on existing lands, farmers and ranchers in Brazil can both avoid deforestation and increase their incomes. Further integrating those small producers into the global economy could make it easier to tackle an important remaining source of deforestation, they argued.

Large multinational corporations also cannot wield their market power everywhere, participants found. Few have deep enough supplier relationships inside African countries to drive wholesale changes in behavior, for instance. Coupled with weaker governance, pervasive corruption, and a challenging security environment, that makes it more difficult to apply lessons from Brazil to countries such as the Democratic Republic of the Congo (DRC). Even in Indonesia, where corporate voluntary initiatives have made substantial changes in the palm oil industry, logging companies, mining companies, and other agricultural producers do not adhere to the same voluntary standards, meaning that overall deforestation rates remain high.

Private voluntary initiatives, moreover, are just that—if pledges are not met or standards not adhered to, there is little that can be done to punish violators. Absent the clear, consistent application of the rule of law and tough enforcement of environmental protections, participants agreed, private sector initiatives can only go so far in protecting forests. But when companies can make money while at the same time reducing carbon emissions, one participant noted, joining NGOs and other companies in voluntary initiatives “will allow us to make faster progress while we wait for public policy to evolve.”

OPTIONS FOR THE UNITED STATES

The workshop sought to identify U.S. policy options to better support private sector, national, and international efforts to reduce deforestation. Ideas included the following:

- *Make it easier for business to help.* In order to meet the most ambitious sustainability commitments, companies may need additional government policies to help them out; one participant noted that the Indonesian Chamber of Commerce, once averse to government green activism, is now lobbying the government for more ambitious regulations to protect forests and more effective enforcement that together would make it easier for member companies to meet their declared sustainability targets while not losing market share to less well-behaved players. Other participants suggested that government subsidies could also help. Because companies face limits on what and where they can invest, subsidies could help make possible corporate sustainability actions that might otherwise not be taken, some participants suggested. Another way to leverage corporate action in support of more forest protection would be to enhance public campaigns to either praise (or shame) highly sustainable (or underperforming) companies.
- *Expand carbon markets.* Some participants voiced support for a price on carbon emissions, whether through a direct tax on emissions or through a cap-and-trade system. Certified avoided deforestation credits could be used to reduce tax liability in the former, or provide tradable credits in the latter. That would help create a larger potential market for the financial value locked inside forests. Although a carbon tax seems a political pipedream in Washington, DC, participants noted how rapidly once-untenable positions have become mainstream. Other participants suggested using REDD more broadly in national cap-and-trade systems and then applying border tax adjustments—essentially carbon tariffs—to imports from countries that do not do the same. Another option is to expand non-aid U.S. government financing, such as that offered by the Overseas Private Investment Corporation, to promote sustainable land use in developing countries.
- *Use Paris as a catalyst.* Several participants noted the potential for Barack Obama’s administration to partner with developing countries on more ambitious international goals. One participant highlighted the opportunity for the United States to financially support countries that have offered to reduce deforestation beyond their existing pledges if they receive additional funding to do so. This could help close some of the potential “emissions gap” between the amount countries have pledged to cut emissions ahead of the December 2015 Paris climate summit and the amount estimated to be necessary to keep average global temperature change below the political target of two degrees Celsius.
- *Walk before you run.* For countries like the DRC, where weak governance makes it difficult to set up verifiable offsets or other REDD initiatives, participants recommended policymakers first look to lay the groundwork for future avoided-deforestation efforts. Strengthening the rule of law, providing technical assistance for forest surveying and monitoring, and developing local capacity in and public support for forest preservation were all discussed.
- *Use trade agreements.* Bilateral and multilateral aid efforts are not the only possible vehicles for helping countries reduce deforestation. For instance, policymakers can also look to incorporate forest and other environmental protections into trade agreements.