WHAT ARE HFLDs?
AND WHY ARE THEY IMPORTANT?

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At a glance:

- High forest, low deforestation, or HFLD, regions are **critical to conserve** from a climate and co-benefit perspective.
- HFLD jurisdictions deliver larger-than-realized mitigation and social benefits by preventing the loss of remaining intact forests. The loss of forests contained within HFLD regions would have a **far greater impact** on the planet compared to the deforestation of already degraded forests.
- HFLD forests are **under threat**, mainly due to economic drivers.
- It is critical to provide **alternative development incentives, including through carbon market finance**, to HFLD countries before their deforestation rate picks up speed and they downgrade to high forest, *high* deforestation status.
- Funneling **carbon market finance** into HFLD jurisdictions to keep critical areas of forests intact is a **crucial piece** of both forest conservation and climate action.

The science is clear that we need to end tropical deforestation to solve the climate crisis[1]***.*** *Keeping forests standing is the best way to prevent forest carbon from entering the atmosphere and is the most urgent need for forest communities and the wider ecosystems that depend on intact forests. High forest, low deforestation (HFLD) regions represent large swathes of intact forests, and they must be protected.*

High forest, low deforestation, or HFLD, is a term that has been gaining increasing attention as the global community, including companies, looks to mobilize climate finance toward forested regions. HFLDs are countries and subnational jurisdictions (such as states or Indigenous territories) that have high extents of forest cover and low ongoing rates of deforestation. The nation of Guyana, located on South America's North Atlantic coast, is an example of an HFLD country as it has more than 85% forest cover and its annual deforestation rates have been consistently low for decades[2].

However, with global deforestation continuing at worryingly rapid rates, even the most remote forests are now under threat. While climate financing to conserve forest carbon mainly focuses on places with high deforestation, in this factsheet we lay out why HFLD regions and the large swathes of intact forests they contain must also be protected.

Defining HFLD

Unpacking the term HFLD is important to understand the unique characteristics that identify these regions, especially because these characteristics matter when it comes to designing climate finance strategies for HFLD regions.

[1] IPCC. (2019). Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. https://www.ipcc.ch/srccl/
[2] Roopsind, A. et al. (2019). Evidence that a national REDD+ program reduces tree cover loss and carbon emissions in a high forest cover, low deforestation country. *PNAS, 116*(49), 24492-24499. https://www.pnas.org/doi/epdf/10.1073/pnas.1904027116

There is no single threshold for what is considered a sufficiently "high forest" cover, or a sufficiently "low deforestation" rate. According to one widely used definition, HFLD countries have at least 50% forest cover and *do* experience deforestation, though at an annual rate below the 10-year historical global average[3]. The researchers behind this definition calculated the global average annual deforestation rate from 1990 to 2000 at 0.22%. This 0.22% deforestation rate is the same cutoff that representatives of HFLD countries use to self-identify[4]. More recent decadal studies have pinned annual global deforestation rates between 0.263%-0.296%[5]. Even with changing reference deforestation rates based on emerging global studies, **about 30 countries and subnational jurisdictions can be considered HFLD**, and all are developing economies[6,7]. It is important to recognize that *all* HFLD countries face some risk of deforestation (see section below, "HFLDs are under threat").

Image: Elephants in Gabon, an HFLD country. iStock.
Header photo: Forest canopy in Republic of Congo, an HFLD country. iStock.

Many HFLD regions feature a high concentration of biodiversity, essential ecosystem services, and additional climate benefits, providing a safeguard for traditional communities and their cultural heritages [8,9,10,11], on top of their massive carbon storage and mitigation potential[12,13]. Critically, 24% of the world's forests - close to one billion hectares - are located in HFLD regions[14]. In many cases, HFLD jurisdictions owe their designation to the enduring efforts of Indigenous Peoples and local communities, who actively defend these forests against risks. One study[15] estimates that the full net carbon impact of intact forest[16] destruction is at least six times greater than just the direct carbon emissions from deforestation, due to associated emissions that follow forest clearing such as selective logging, edge effects, defaunation, and foregone removals. Thus, the loss of forests contained within HFLD regions would have an outsized climate impact on the planet compared to what most climate financing currently targets: reducing the deforestation of already degraded forests, and replanting forest areas.

HFLDs are under threat

HFLD status is not a permanent land classification - it represents a moment in time - and countries can lose or gain HFLD status. Just because a country has high forest cover does not mean that this will always be the case. HFLD forests ***are*** at risk of deforestation, mainly due to economic drivers. Over the last two decades (2000-2020), 12% of intact forest landscapes have been lost[17]. This is due to the same forces that are increasing deforestation rates worldwide as encroachment becomes more widespread and infrastructure and extractive activities extend into previously remote areas with unsustainable development. The price of development means that heavily forested regions are under pressure from extractive industries such as mining, logging, and agriculture, all of which expand at the expense of natural resources like forests. In 2021 alone, primary tropical forest loss contributed 2.5 Gt of CO_2 emissions, equivalent to the annual fossil fuel emissions of India[18].

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[3] da Fonseca, GAB. et al. (2007). No Forest Left Behind. *PLoS Biol, 5*(8), e216. https://doi.org/10.1371/journal.pbio.0050216
[4] Krutu of Paramaribo Joint Declaration on HFLD Climate Finance Mobilization. (2019). https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201903220903---Krutu%20of%20Paramaribo_13-02-19.pdf
[5] Based on FAOSTAT data from 2000-2010 and 2009-2019, presented in World Bank Group. (2021). Options for conserving stable forests. http://documents1.worldbank.org/curated/en/541251635971110855/pdf/Options-for-Conserving-Stable-Forests.pdf
[6] Krutu of Paramaribo Joint Declaration on HFLD Climate Finance Mobilization. (2019). https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201903220903---Krutu%20of%20Paramaribo_13-02-19.pdf
[7] Climate Impact X, Conservation International, Emergent, Natural Climate Solutions Alliance, & Wildlife Conservation Society. (2022). Preserving Forests in High Forest, Low Deforestation Jurisdictions. https://uploads-ssl.webflow.com/6230bcdb48cea9dee3e38a3b/6364a0409c173f32c46a30ee_Whitepaper%20-%20Project%20Preservation.pdf
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[15] Maxwell, SL. et al. (2019). Degradation and forgone removals increase the carbon impact of intact forest loss by 626%. *Science Advances, 5(*10). https://doi.org/10.1126/sciadv.aax2546
[16] Intact forest landscapes (IFLs) are free from significant degradation. Many HFLD regions contain IFLs.
[17] Potapov, P. et al. (2017). The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. *Science Advances, 3*(1). https://doi.org/10.1126/sciadv.1600821; data updates through 2020 can be found here: https://www.intactforests.org/world.map.html
[18] https://research.wri.org/gfr/latest-analysis-deforestation-trends

As a general trend, when forested countries proceed through economic development, forest cover first rapidly declines, and then slightly increases, stabilizing at a lower level than before[19,20]. This is known as the forest transition curve (see Figure 1)[21]. This pattern has played out all over the world repeatedly. As forest cover initially declines, the rate of deforestation itself increases (forest is lost *faster*)[22]. Curbing the deforestation rate before it accelerates too much is important to prevent countries from downgrading to high forest, *high* deforestation status.

In spite of the known importance of forests for climate mitigation and other ecosystem services, deforestation is projected to increase across the tropics[23], raising an urgent need to preserve forest stocks. Models predict that tropical deforestation will rise in Latin America and Africa and will stay roughly constant in Asia over the next 15 years in the absence of economic incentives for forest conservation[24]. Even areas where deforestation has been historically low are poised to be under threat in the future if incentives for sustainable development do not emerge.

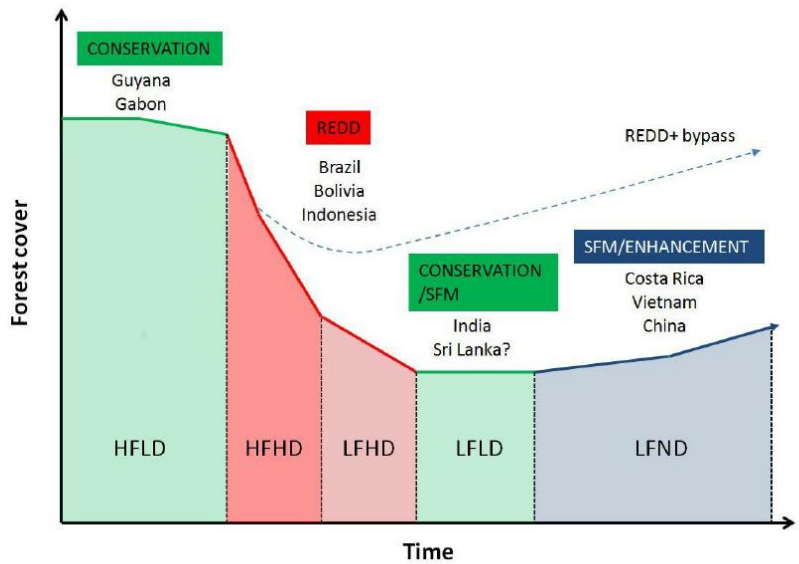

Figure 1: Illustration of Forest Transition Curve

The need for financing

There is an urgent need to provide alternative sources of income to HFLD regions and to place a financial value on their standing forests because of their unique characteristics. This two-pronged approach can ensure trees are not cut down due to economic pressures. However, most current carbon market methodologies for forest-related activities are either-based on reducing high levels of forest loss or planting more trees. Without the proper financial incentives to conserve these regions, which encourage the active maintenance of forest carbon stocks, there is no guarantee that forests in HFLD areas will remain effectively protected in the long run and avoid the transition to *low* forest, *high* deforestation. Fortunately, alternative development pathways are available that value standing forests instead of driving their destruction.

One economic instrument, the carbon market, offers a way to reward forest stewardship by putting a price on the carbon-value of standing forests. Incentives to set up agroforestry, sustainable agriculture, ecosystem services, and continued forest conservation can be part of the climate and economic solution for heavily forested countries. For example, the Reducing Emissions from Deforestation and forest Degradation (REDD+) framework[25] could help countries, including HFLD countries, transition to an economic development pathway that bypasses severe forest cover loss by incentivizing forest-positive practices, as shown by the "REDD+ bypass" line in Figure 1. Funding of nature-based solutions to climate change, such as forest conservation, must be provided now to ensure the vital functioning of carbon-sequestering ecosystems, capture critical co-benefits provided by these systems, and continue the social and cultural heritage provided by these landscapes[26].

The goals of the Paris Agreement cannot be met if global forest loss continues. Forest loss must be decoupled from economic development. Funneling finance into HFLD jurisdictions to keep critical areas of forests intact is a crucial piece of both forest conservation and climate action.

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[24] ibid
[25] REDD+ is a framework that was created by the UNFCCC, adopted at COP19 in Warsaw in 2013. It guides activities in the forest sector that reduce emissions from deforestation and forest degradation, along with the sustainable management of forests and the conservation and enhancement of forest carbon stocks.
[26] Lovejoy, T. & Nobre, C. (2019). Amazon tipping point: Last chance for action. *Science Advances, 5*(12). https://doi.org/10.1126/sciadv.aba2949

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