



DEFORESTATION FRONTS

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The WWF Forest Practice has identified **24 deforestation fronts**,¹ which have both a concentration of deforestation hotspots and large remaining areas under threat. Over 43 million hectares were lost in the fronts between 2004 and 2017, about the area of Morocco. Losses are greatest in the tropics and sub-tropics, which also have the most severe forest fragmentation. *Expansion of commercial agriculture and plantations* is by far the largest driver of loss, which in some cases can be powered by land speculation. Smallholder farming and extractive activities, particularly mining, are also increasingly important. Along with catastrophic impacts on biodiversity, losses undermines ecosystem services and *nature-based solutions*, such as carbon capture and storage, disaster risk reduction, water and food security.

WWF HAS IDENTIFIED 24 DEFORESTATION FRONTS, WITH A CONCENTRATION OF DEFORESTATION HOTSPOTS AND LARGE AREAS STILL UNDER THREAT. EXPANSION OF COMMERCIAL AGRICULTURE AND PLANTATIONS IS BY FAR THE LARGEST DRIVER OF LOSS

Deforestation Fronts

LATIN AMERICA	SUB-SAHARAN AFRICA	SOUTHEAST ASIA AND OCEANIA
<ul style="list-style-type: none"> 1 Amazon – Brazil 2 Amazon – Colombia 3 Amazon – Peru 4 Amazon – Bolivia 5 Amazon – Venezuela/Guyana 6 Gran Chaco — Paraguay/Argentina 7 Cerrado Brazil 8 Chocó-Darién Colombia/Ecuador 9 Maya Forests – Mexico/Guatemala 	<ul style="list-style-type: none"> 10 West Africa – Liberia/Ivory Coast/Ghana 11 Central Africa – Cameroon 12 Central Africa – Gabon/Cameroon/Republic of Congo 13 Central Africa – DRC/CAR 14 Central Africa – Angola 15 East Africa – Zambia 16 East Africa – Mozambique 17 East Africa – Madagascar 	<ul style="list-style-type: none"> 18 Mekong – Cambodia 19 Mekong – Laos 20 Mekong – Myanmar 21 Sumatra – Indonesia 22 Borneo – Indonesia/Malaysia 23 New Guinea – Indonesia/PNG 24 Eastern Australia

This study focuses on deforestation in forest landscapes in the tropics and sub-tropics. Conversion of other ecosystems, especially for agricultural expansion, is also advancing at an alarming rate, especially in grasslands and savannahs, in the Great Plains of North America, Brazilian Cerrado, African savannah and miombo, and elsewhere.

¹ See Pacheco, P., Mo, K., Dudley, N., Shapiro, A., Aguilar-Amuchastegui, N., Ling, P.Y., Anderson, C., and Marx, A. 2021. Deforestation Fronts: Drivers and responses in a changing world. WWF, Gland, Switzerland.



Multiple responses to deforestation have been attempted by governments and NGOs, including WWF. Some work better than others, all have limits.

Area-based responses – protected and conserved areas, tenure rights of Indigenous Peoples and Local Communities (IPLCs) and moratoria on conversion – can prevent loss of particular forests, but don't stop deforestation beyond their boundaries, and can displace forest loss elsewhere, including to valuable grassland and savannah. **Sector-specific responses** – voluntary certification, deforestation-free supply chains and payments for environmental services – are important but have so far had limited impact at scale or in the most threatened forests.

Integrated approaches – such as result-based payments for reducing deforestation (e.g. REDD+), jurisdictional and landscape approaches – are vital. They leverage the power of markets and finance but still need strong state policies to ensure compliance; progress in developing national and jurisdictional REDD+ is not yet matched by implementation. The central role of agriculture means responses must tackle food systems, diet and consumption. But real impacts will only come from transforming our economic system – particularly as it relates to food production and consumption – to place nature and people at centre stage.

Responses to deforestation and its drivers need to be inclusive and tailored to local and regional contexts, including ensuring they do not inadvertently threaten other ecosystems. Solutions are most effective when multiple options are combined in ways that achieve reinforcing effects. .

LESSONS LEARNED:

Making strategic use of the deforestation fronts research

The study shows that despite huge conservation efforts, we are still losing ground in many critical areas. Simply more of the same will not work. New approaches are needed, working together in an integrated manner. We looked carefully at what was and was not working to conserve the world's forests. Here are some of the lessons to translate into actionable policies with time-bound measures and targets:

What not to do: keep providing subsidies to unsustainable forms of commercial agriculture, tolerate corruption, permit damaging land speculation, fail to punish illegal deforestation, continue to deal with unsustainable supply chains and ignore serious human rights abuses in forests.

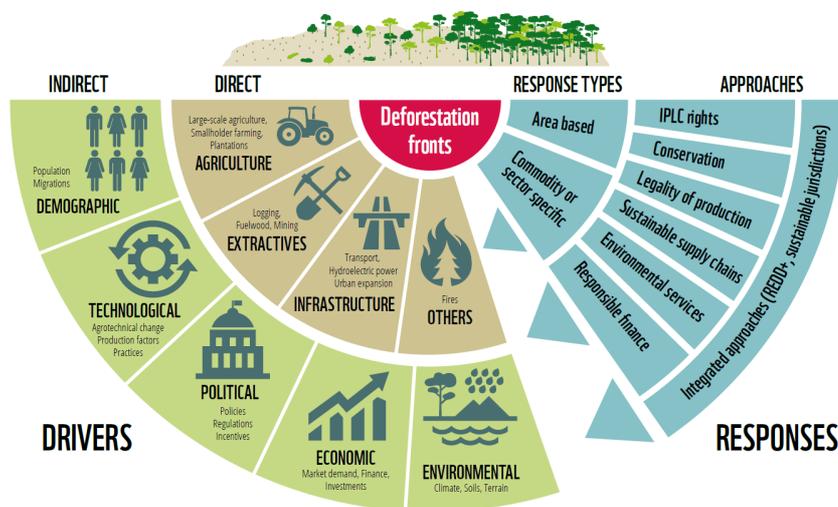
What to do more: strengthen and expand local tenure rights for Indigenous People and local communities (IPLCs), increase law enforcement budgets and training and extension services for forest conservation and management, public monitoring of deforestation, create public-private partnerships at the sub-national level to encourage sustainable forest use and management, set moratoria with clear targets, restore forests landscapes including connectivity in fragmented areas.

What to do better: compensation or payment for ecosystem services, mechanisms for rewarding farmers who improve practices, zero-deforestation commitments by national companies, real-time monitoring, extension services for good forest management, participatory conservation planning, regulations on importing wood from countries with deforestation, focus protected and conserved area networks on deforestation fronts, target certification schemes in priority places, address international land speculation.

THE STUDY SHOWS THAT WE NEED TO EMBRACE BOLDER CONSERVATION ACTIONS AND MAKE TRANSFORMATIONAL CHANGES IN THE WAY WE PRODUCE, CONSUME AND TRADE FOOD, REDUCING WASTE, AND FAVOURING HEALTHIER AND MORE SUSTAINABLE DIETS.

What to do differently: incentives and compensations for farmers adopting sustainable practices, supporting alternative livelihoods, affordable finance for sustainable production, partnerships that create shared value, increase participation in planning forest conservation, management and monitoring, increase the emphasis on non-traditional ways of securing forests including territories for life (ICCAs) and other effective area-based conservation mechanisms (OECMs), avoid forest protection impacting negatively on other ecosystems through leakage, better integration of biodiversity, agriculture and forestry within governments.

What new things to do: early warning systems for deforestation, automated forest monitoring, tracking systems to attribute emissions to specific companies/commodities, optimised landscape planning with responses adapted to context, provide incentives to keep forests standing.



Linking drivers and responses

This framework shows the links between drivers of deforestation globally and the existing approaches to address them. How these approaches address drivers plays an important role in shaping the dynamics of deforestation fronts, which are at the centre of our analysis

Regional, national and local responses to the challenge of the deforestation fronts

There are some clear responses needed both inside and outside the deforestation fronts; with close liaison needed to ensure consistent messaging and mutually supportive actions.

In deforestation front countries:

- Focus conservation efforts (new protected and conserved areas, improved management of existing areas, voluntary certification schemes, Payment for Ecosystem Service [PES] and REDD+ schemes) in the areas of greatest need within deforestation fronts.
- Apply landscape-level planning to minimise forest fragmentation, maintain ecological connectivity, buffer territories of indigenous peoples and local communities, and avoid forest conservation leading to conversion of ecosystems such as grasslands and savannahs (leakage).
- Work with indigenous peoples and local communities to develop mutually beneficial strategies to secure traditional cultures and territories and to benefit biodiversity and ecosystem services.
- Tighten, where necessary, policies and implementation of regulations and sanctions controlling illegal extraction of and trade in timber, illegal use of fire for vegetation clearance and destructive land speculation.



- Look at new opportunities, for example arising through the [UN Decade on Ecosystem Restoration](#), to restore forests and particularly to maintain and enhance connectivity between remaining natural forests.
- Work with upstream suppliers to ensure effective legality and chain of custody, in collaboration with markets in consumer countries.

In consumer countries:

- Engage with forest countries to agree sustainable solutions to forest loss, including support for credible moratoria, payment for ecosystem service schemes including REDD+ and similar, effective chain of custody, checks on legality and regular monitoring to ensure compliance.
- Continue and step up consumer campaigns to raise awareness of and support for campaigns to reduce use of unsustainable forest products.
- Lobby for bilateral aid packages and trade deals to support reduced deforestation and conversion in key areas and to promote nature-based solutions for food and water security, climate stabilisation and disaster risk reduction.
- Create a market for sustainably produced and sourced commodities: Introduce policies and legislation that ensure all imported forest commodities and products – and related finance – are free from deforestation and ecosystem conversion, and respect human rights. Promising legal actions at EU-level are underway, join the [#togetherforforests](#) campaign
- Establish meaningful partnerships with governments in producing countries to support their transition to sustainable production (including at landscape level) and scale up technical and financial assistance to do so.

In looking for lasting solutions at scale, responses need to consider specific locations or fronts (including leakage effects) as well as timing (urgency, duration).

Global Responses:

How the analysis can inform global policy and thus reduce deforestation

This report is launched at a pivotal moment in the “super policy year” for nature, with new forest targets under the [New York Declaration on Forests](#), a CBD post-2020 Global Biodiversity Framework(GBF) under negotiation, revision of Nationally Determined Contributions (NDCs) in UNFCCC, launch of the UN Decade on Ecosystem Restoration and mounting support for the New Deal for Nature and People. These moves are backed by the recent [Leaders’ Pledge for Nature](#), calls for moratoria on conversion of natural vegetation and global policy actions on deforestation-free supply chains.

Scale up [nature-based solutions](#), including for [climate](#) - from forests, from niche to mainstream, which will help to achieve a wide range of the [Sustainable Development Goals](#) and achieve the 1.5 degree target of the [UNFCCC Paris Agreement](#). State-sponsored programmes are key to building PES schemes and moving beyond project-based interventions. Central to debates is our evidence of the importance of promoting REDD+, including social safeguards and monitoring to ensure that programmes are delivering.

Ask for 30% of protected and conserved areas under a new CBD GBF, with a focus on Key Biodiversity Areas: Protected and conserved areas are key,



underscoring the need to protect 30% by 2030 in post-2020 targets under a CBD GBF. The analysis identifies *some of the key areas that need further protection* and that *forest quality* is in some cases as important as the area under trees. This is where global datasets like Key Biodiversity Areas – the most important sites globally for species and ecosystems – are critical, to ensure protected and conserved areas are sited in the right places. Governance mechanisms are also critical here: Free, Prior and Informed Consent, tenure rights and support for indigenous people and local communities, use other effective area-based conservation mechanisms and policies that ensure compliance, monitoring and management effectiveness are all key elements of a New Deal for Nature.

Include a target or indicator on fragmentation under a new CBD GBF and ensure all relevant GBF targets include language and indicators on ecological connectivity. Mapping forest fragmentation is new and gives an important message to CBD signatories in terms of wider post-2020 aims: a measure of forest (and other ecosystem) fragmentation, and conversely their connectivity, should be included in several targets and indicators. Current CBD post-2020 drafts stress “area, *connectivity and integrity* of natural systems” at goal level, and include connectivity in targets on spatial planning and protected and conserved areas, but connectivity should also be reflected in targets covering agriculture, given agricultural expansion is one of the main drivers of fragmentation. Keeping integrity of forest ecosystems is almost as important as avoiding complete conversion.

Include clear and ambitious forest targets in updated NDCs: Climate change mitigation and adaptation needs forest conservation, and vice versa. Countries are due to submit revised NDCs to UNFCCC by 2021. Forests provide a huge opportunity to demonstrate increased climate ambition. Forest countries, particularly in tropical and boreal regions, need to show leadership and include clear and quantifiable **targets and include forest protection, restoration and avoided deforestation in revised NDCs.**

Transforming the food system is at the heart of these issues, touching on production, processing, diet and consumption. Moves towards a [UN Convention on Food](#) are important, but there is much to be done immediately, including a moratorium on conversion of natural ecosystems for plantation agriculture and ranching (which speaks to the [Land Degradation Neutrality](#) target of the [UN Convention to Combat Desertification](#)), ensuring agricultural imports are deforestation-free, and scaling up support to developing countries to transition to sustainable agriculture, thus providing an important basis for ecological connectivity.

Integrated approaches within countries are critical; at regional (e.g., COMIFAC, SADC, ASEAN) and national level. Ministers of Agriculture, Fisheries, Forestry; of Industry and Trade; and of Climate and Energy need to collaborate to develop and implement nature-positive plans of action for food and agriculture, forestry, fisheries, infrastructure and the energy, extractives and manufacturing sectors to transition to sustainable consumption and production and a circular economy operating within planetary boundaries.

Scaling up of public and private sector finance for forests: Less [than 3%](#) of climate finance goes to forests - with just [1.5% to tropical, forest](#) - despite the critical role of forests in mitigating climate change. Forest finance need to be urgently scaled up and conferences in 2021, including the CBD COP 15 and UNFCCC COP 26, provide a good opportunity for both private and the public sector to make ambitious financial commitments.

THE DEFORESTATION FRONTS ANALYSIS OFFERS INFORMATION TO SUPPORT MANY WWF PRACTICES – FOOD, WILDLIFE, CLIMATE ETC - AND FEEDS DIRECTLY INTO TARGETS OF THE CBD, UNFCCC, UNCCD AND THE SUSTAINABLE DEVELOPMENT GOALS.

