CFA Newsletter

No.105 June 2024 ISSN 1750-6417

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CFA Newsletter
is the newsletter of the Commonwealth Forestry Association

Editor: Alan Pottinger

Contact: The Crib, Dinchope, Craven Arms, Shropshire SY7 9JJ, UK

Tel: + 44 (0) 1588 672868

Email: cfa@cfa-international.org

Web: www.cfa-international.org

The views expressed are not necessarily those of the CFA.

Publication of the CFA Newsletter is supported by a bequest from Jim Ball

Norman Lewis: CFA's oldest member

Norman Lewis grubbing fire breaks, Mt Burr Forest, Australia in 1943

Commonwealth Forestry Association member Mr Norman Benjamin Lewis is a Forester. Now 107 years old, he still counts himself a Forester, retaining a keen interest while acknowledging the many changes that continue to develop Forestry practice across the world.

Norman was born in 1916 in Adelaide, South Australia. He graduated from High School but, as for many students at the time, the Great Depression put university study out of reach.

He worked various jobs until one Supervisor, identifying Norman's strengths and knowing his love for geology, handed Norman a newspaper advertisement for cadetships with the South Australian government's Woods & Forests Department, encouraging him to apply.

Norman was accepted to both work and concurrently undertake night-time study for a Bachelor of Science (Forestry) at Adelaide University, beginning in 1937: Norman remains grateful to that mentoring Supervisor. Although Norman undertook his Army Signals training at this time, Forestry was a reserved occupation during the Pacific conflict and he was ordered back to the trees.

Following the completion of his undergraduate studies, Norman entered

the Australian Forestry School (now part of the Australian National University, Canberra) as a full-time student during 1945–46 to complete his Diploma of Forestry. He returned to the SA Woods & Forests Department as Assistant Forester, Penola and Mt Burr Forest Reserves.

Norman says he was very fortunate to work with experienced foresters like Mr Bob Stolz and Mr Norman Hall, as well as undertaking research on forest thinning with Mr N W Jolly, a pioneer in this area in Australia.

Marriage in 1948 to Mavis Harney is, Norman considers, the best move he made in all his life. That partnership survived until Mavis' death in 2001.

In 1957 Norman was made head of the new Working Plans Branch at Mt Gambier, SA, collecting and developing measurement data for forest growth prediction and writing two publications – the *South Australian Optimal Thinning Range* and *Thinned Stand Yield Tables* – which remain basic to SA plantation management and yield regulation today. All calculations were done using his slide rule.

Norman was awarded the Russell Grimwade Scholarship to study at Oxford University, UK, in 1958–59, gaining a Dip.For. (Oxon.) with a dissertation on thinning in coniferous plantations. He travelled in Europe and through southern Africa on extended studies, making life-long friendships and enduring Forestry research relationships, both personally and for the Woods & Forests Department's benefit. During the 1950s and 1960s Norman's work is considered pivotal in helping South Australia to expand and consolidate Australia's first profitable, sustainable forest service and associated timber industry.

He has over 40 publications to his name, covering silviculture, management and economics of plantation forestry with radiata pine and his most popular work, *A Hundred Years of State Forestry*. In 1967 Norman was appointed Chief, Forest Management Division, moving on to become Assistant Director, Forest Operations, Woods & Forests Department.

Norman's expertise in dryland forestry and forest mensuration led to many world-wide conference speaking invitations. During the 1970s he undertook forestry consultancy in Surinam for the FAO and in 1974 was awarded the Institute of Foresters of Australia's NW Jolly medal, the highest and most prestigious honour for outstanding service to the profession of forestry in Australia.

Following his 'retirement', Norman became Senior Associate at the School of Agriculture and Forestry, University of Melbourne, co-publishing with Professor Ian Ferguson and in 1981 was awarded the Imperial Service Order for Services to Forestry.

Norman on his 101st birthday, in 2017.

Norman is a Fellow, and twice President, of the Institute of Foresters of Australia, now Forestry Australia. He is a Life Member of the New Zealand Institute of Forestry and, of course, a member of the Commonwealth Forestry Association.

Away from forestry, Norman studied geology under Sir Douglas Mawson at the University of Adelaide, and this developed a life-long interest in the Antarctic. He has visited the Antarctic on both a supply ship and an ice-breaker, leaving from Australia and New Zealand respectively, and his final trip there was as a 92-year-old on a tourist-based ship from South America.

Norman has also had a long and highly-valued involvement with Rotary International. He currently resides at West Beach in Adelaide, South Australia.

Dr Jo Ankor BCT Hons.
(daughter)

Forest Scenes

Can forests be more profitable than beef?

Cattle ranches have ruled the Amazon for decades. Now, new companies are selling something else: the ability of trees to lock away planet-warming carbon

Forest restoration workers planted native Amazonian seedlings on degraded pastureland in Mãe do Rio, Brazil. (Photo: Victor Moriyama)

The residents of Maracaçumé, an impoverished town on the edge of the Amazon rainforest, are mystified by the company that recently bought the biggest ranch in the region. How can it possibly make money by planting trees, which executives say they'll never cut down, on pastureland where cattle have been grazing for decades?

"We are killing pasture that a lot of farmers need," said Josias Araújo, a former cowboy who now works in reforestation, as he stood on a patch of soil he was helping to fertilize. "It's all strange."

The new company, which is also Mr. Araújo's new employer, is a forest restoration business called Re.green. Its aim, along with a handful of other companies, is to create a whole new industry that can make standing trees, which store planet-warming carbon, more lucrative than the world's biggest driver of deforestation: cattle ranching. It's the holy grail of the forest economy. And now, it might be within reach.

The stakes are high. About a fifth of the great rainforest is already gone. And scientist warn that rising global temperatures could push the entire ecosystem, a trove of biodiversity and a crucial regulator of the world's climate, to collapse in the coming decades unless deforestation is halted and an area the size of Germany is restored.

Re.green plans to restore native trees in deforested areas and sell credits that correspond to the carbon they lock away. Those trees will be protected, not logged. Then, businesses will use those credits to offset their own greenhouse gases in emissions accounting.

The bet hinges on the success of a system that's being built from scratch and comes with some big challenges. Measuring the carbon held in trees and soil is complex. And, many conservationists worry that carbon credits could easily be abused by companies that want to appear environmentally conscious while sticking with fossil fuels. Still, reforestation projects have created a buzz in the northern Amazon, where companies are rushing to buy up big plots of land with restoration potential.

"You know that people who handle cattle don't care much about this reforestation stuff," said Anderson Pina Farias, a rancher whose farm is almost completely deforested. But, he added, "if selling carbon is better than ranching, we can change businesses."

Challenging an Empire

Tree seedlings on a former pasture in Mãe do Rio that borders rainforest.

A backlash from nature seems to be helping the restoration companies win hearts and minds in a region where ranching culture runs deep.

Jose Villeigagnon Rabelo, the mayor of Mãe do Rio, a city in the northeastern part of the Amazon, is worried. A brutal drought fueled by climate change and deforestation has recently dried out much of the grass that ranchers there use as feed. And, after decades of pounding by hooves, millions of acres across the region have become so degraded they can't nourish much of anything. "The cattle are starving," Mr. Rabelo said sitting in his office, with wooden paneling and benches made of angelim-vermelho, a tree that's become hard to find in the region. "We've never had a summer like this."

The crisis has prompted ranchers to dedicate bigger and bigger parts of their farms to feed ever-shrinking numbers of cattle. Now, fewer than half of the ranches registered with the city have any cattle on them. But around a year ago, a restoration company called Mombak started a 7,500-acre project on one of the region's biggest ranches. Mr. Rabelo says he is hopeful the new industry will offer the community a lifeline.

The idea is simple: A credit for each ton of carbon that the trees pull out of the atmosphere can be sold to companies that want to compensate for their own pollution.

Environmental disruptions, combined with growing interest in carbon credits, have created an opening to challenge the beef empire's hold on vast stretches of the rainforest, experts say. According to a 2023 report by BloombergNEF, carbon markets could be valued at $1 trillion by 2037, double what the global beef market is worth now.

Growing a large, biodiverse forest on degraded land can cost tens of millions of dollars. For years, forestry projects had to rely on multiple revenue streams, including sustainable timber harvesting, to restore soil and grow different types of natives trees. But companies looking to burnish their climate credentials are increasingly willing to spend more to fund projects they deem to be high quality. It's why companies like Mombak and Re.green are now developing a business model that relies almost solely on carbon credits, with little or no logging.

Microsoft has bought a major project from Mombk, and Re.green says it expects to announce buyers soon. The two companies have raised some $200 million from investors – including large pension funds, the Brazilian Development Bank and global asset managers – to reforest hundreds of thousands of acres by the end of the decade.

Seedlings on the Re.green farm in Maracaçumé. The supply of seeds for native trees is still a bottleneck.

"Scaling all of the other carbon removal sectors, it's just going to move too slow," said Brian Marrs, Microsoft's senior director of energy and carbon. "I don't think there's a solution to carbon removal without global forestry included."

Part of the strategy of companies like Mombak and Re.green is to help farmers improve land and intensify cattle ranching in some degraded areas while restoring forests on others. On average, Amazon ranches support one animal on every two acres. That could rise to three animals with little investment, researchers say.

Most projects employ a few dozen local people to plant trees, fertilize the soil and stand lookout for fires. The companies are also funding and training local businesses to provide much-needed native seeds and seedlings. In some projects, as the forests grow local communities can also make a living from collecting and processing Brazil nuts, andiroba oil and other forest products they can sell to food, beauty and pharmaceutical companies.

When a standing forest becomes an answer to people's range of needs, that becomes a powerful reason for communities to protect it, said Luiza Maia de Castro, an economist who is managing community relations for Re.green. Right now, razing trees is a perfectly acceptable livelihood in most of the Amazon. "To break that cycle," she said, "you have to change how people make a living."

The efforts still face big challenges. The supply of seeds for native trees is a bottleneck, and finding farms to buy in regions where land tenure is chaotic can take months of research. Perhaps more important, the trajectory of carbon credit prices depends on whether the world can agree on what a high-quality credit looks like. The carbon markets have been repeatedly rattled by academic and media investigations that revealed dozens of projects had overstated their emissions impact, for instance, by "protecting" forests that were never in danger of being cut down.

But reforestation projects store carbon by growing trees on degraded land, a more straightforward system. Some experts caution that displaced cattle could simply continue to drive deforestation elsewhere and that wildfires could erase the benefits of trees that took decades to grow. "It sounds like carbon finance can make a difference," said Barbara Haya, the director of the Berkeley Carbon Trading Project, which has investigated

Djalma Soares, a rancher, said the idea of bringing the forest back to life was "beautiful."

a number of carbon forestry projects. But she said there were also real questions about accounting methods.

On top of that, she added, "it's problematic to trade forest carbon for fossil fuel emissions." That's partly because buying carbon credits might prove less costly than transitioning a business away from dirty sources of energy, the thing that scientists say the world must ultimately do to avoid the worst effects of climate change.

And, remaking a forest isn't only about the carbon math. It takes a lot more than planting trees. To get it right, scientists working in restoration have to study how each plant fits into a complex ecosystem.

Creating the conditions for vines, bromeliads and orchids to grow is a part the challenge, too, Ricardo Rodrigues, a professor at the University of São Paulo and a co-founder of Re.green said. It's how you make sure the forest will remain a forest after humans stop helping it along.

Right now, the idea is to get both humans and nature to work together. Techniques vary, depending on how far each parcel of land is from the existing forests. The nearest new plots benefit from the forest's regenerative powers.

In Mãe do Rio, reforestation workers have been planting 1,000 seedlings a day, working alongside tractors that make trenches on the soil. Drones are documenting their progress.

Six months after the first round of planting, the team was ready to measure the 44 trees in one sample plot. Luiz Carlos Batista Lobato, a botanist who specializes in tree censuses, walked across the plot to document three trees that had died, many that were taller than him and one that was more than two inches thick.

In a few years, Mr. Batista Lobato said, monkeys and armadillos would come to eat the fruits of different trees and birds would feast on the açaí berries, dispersing their seeds as they move around the forest.

Watching the trees start to grow helped to dispel some of the skepticism that farmers across the region still have. Back in Maracaçumé, Djalma Soares, a rancher who works on land next to the Re.green project, said that, though he still loves his cattle, he can't deny that the idea of bringing the forest back to life is "beautiful."

Mr. Soares said he never had the privilege of studying all the other things he could do with his farm beyond raising cattle. But, still, he feels the unrelenting heat. Seeing his neighbors work to address that, he said, is inspiring. "We end up feeling like following the same path," he added, as he watched the sun set on a vast pasture. "We see that it's the future."

By Manuela Andreoni
nytimes.com

Why businesses should stop planting trees and start protecting forests

Investing in forest protection is the most effective approach to enhancing forest carbon sequestration and supporting biodiversity

(Credit: Sophia Davirro/GreenBiz)

Tree planting pledges have become a near-universal sign of corporate environmental commitment, despite widespread project failures, negative unintended consequences and a lack of accountability. Over 100 companies from 148 countries have pledged to the World Economic Forum's Trillion Tree campaign. And a recent study found that 98 percent of Fortune 500 companies in France, Switzerland and the United Kingdom have been involved in tree planting projects over the past two decades.

Companies cite carbon offsetting, remediation, sustainable sourcing, communications and marketing, and team building as the primary drivers of this trend. With 90 percent of Americans in support of tree planting, it's a winning issue for businesses and politicians looking to gain favor with key stakeholders. But is it the right strategy to solve the biodiversity and climate crises? Evidence suggests no, and here's why.

Protecting forests should take priority over planting new ones

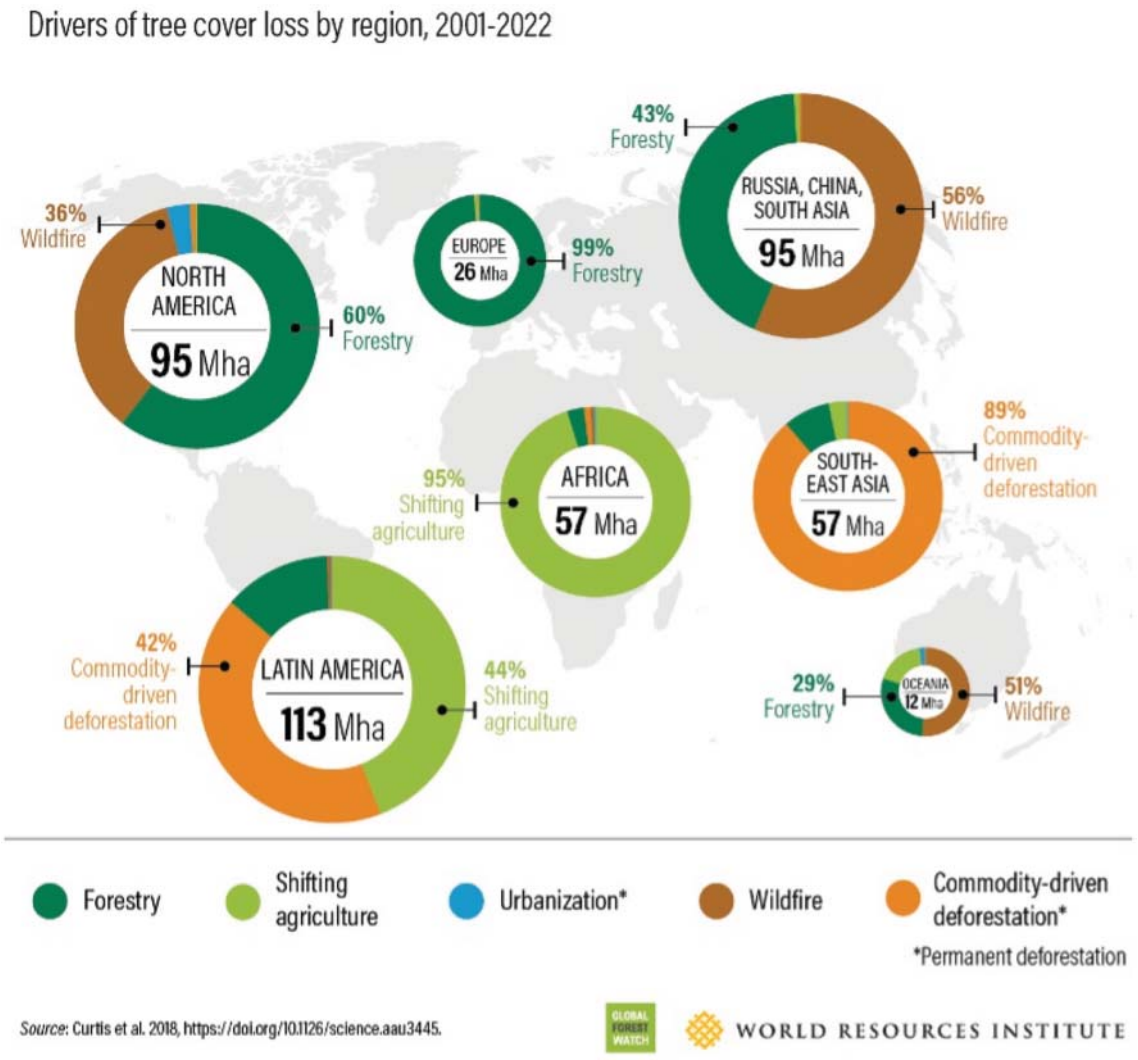
Tree planting programs often lead to a loss of biodiversity, taking us further away from achieving a nature-positive world. Mexico's Sowing Life campaign destroyed over 180,000 acres of forest in its first year due to a perverse incentive structure. China's Grain for Green program reduced the country's native forest cover by 6.6 percent as a consequence of planting single-species tree plantations. And projects across the world have destroyed non-forested ecosystems (grassland, shrubland and peatland) through afforestation, the act of planting trees in areas where forests would not otherwise occur.

Despite all the campaigns and pledges, forests continue to disappear globally at an unprecedented rate. Even if we could plant enough trees to keep up with the current rate of forest loss, the traits that make forests long-term carbon sinks and biodiversity strongholds – large trees, mature ecosystems and soil accumulation – can take centuries to re-create.

Preventing further ecosystem destruction is the most effective, immediate and low-cost approach to enhancing forest carbon sequestration and supporting terrestrial biodiversity. Instead of pledging to plant trees, companies should commit to implementing a credible deforestation policy and investing in forest protection beyond their supply chains.

In the absence of sustained stewardship, forest protection will fail

Of the forests that remain intact, 82 percent have been degraded by human activity. This includes forests that are already classified as protected. The impacts of degradation include an increase in land claiming and violation of territorial rights, deterioration of health and food security, changes in microclimate and water availability, loss of biodiversity and the collapse of local



Source: World Resources Institute

economies. Degraded forests fail to achieve their full carbon storage potential.

Protection alone is not enough; protected forests are still exposed to rising temperatures, changes in water availability, wildfire frequency and intensity, novel pathogens and introduced species.

Resilient forests require sustained stewardship. In many forested regions, that means addressing the sociopolitical drivers that cause deforestation and degradation to begin with. Tree planting programs are often pitched as providing economic benefits to local communities, including smallholder farmers. But they fail in this regard when planted trees are not maintained, the land is used for activities other than restoration or the land is recleared.

One of the most effective ways to support long-term forest resilience is securing the rights of rural and Indigenous communities to make land management decisions. Forests managed by Indigenous people protect most of the remaining biodiversity on earth and also sequester more carbon than those outside Indigenous lands. In addition to advocating for stronger land titling laws in sourcing regions, companies should establish clear free, prior and informed consent policies before undertaking activities in Indigenous-owned forests.

The best place for tree planting is not in a forest

Planting trees is not the same as protecting or restoring forests. But there are several cases where tree planting is a critical tool for achieving the desired outcome.

Perhaps the most important use case is in cities, especially in communities historically underserved by local governments. Achieving tree equity in cities has innumerable benefits, including improved air and water quality, counteracting extreme temperatures and enhanced quality of life. A great example of this is American Forests' pledge to plant and protect 1.2 million trees in cities across the United States.

This effort goes beyond planting trees to establish models of community stewardship. The project includes developing tree nurseries in cities to provide affordable tree stock, hosting learning labs for local stakeholders, propagating disease- and pest-resistant specimens that require less maintenance, establishing career pathways for marginalized communities and developing innovative finance mechanisms for urban forestry. Corporate funding partners include Bank of America, Timberland and Footlocker, Goldman Sachs, Microsoft and Salesforce.

greenbiz.com

Certified timber harvesting of tropical forests proves beneficial for gorillas and elephants

Elephants photographed by a camera trap. (Credit: Joeri Zwerts)

Forest Stewardship Council (FSC)-certified timber harvesting areas in Gabon and Congo boast a greater abundance of larger mammals, such as leopards, gorillas, and elephants, than non-FSC forests.

Utrecht University researcher Joeri Zwerts and colleagues conclude this based on 1.3 million camera trap images gathered in fourteen commercially exploited forests. The researchers' analysis reveals the effectiveness of wildlife conservation measures

in FSC-certified forests. The results of the study are published in the scientific journal *Nature*.

FSC, a non-profit organization, is dedicated to advocating responsible forestry practices to foster a healthy, resilient natural environment and to enhance the social and economic well-being of communities. In pursuit of these goals, the FSC issues certificates to timber harvesting companies that meet a set of conditions.

According to biologist Joeri Zwerts, up to now no independent research has provided conclusive evidence that FSC certification leads to strong benefits for forest biodiversity. Yet in making informed decisions about endorsing a label, consumers, policymakers, and NGOs require clear identification of the label's actual impact.

This means it was high time for a comprehensive study, which was initiated by Utrecht University researcher Marijke van Kuijk and carried out with the backing of the World Wide Fund for Nature and the Wildlife Conservation Society.

More large mammals

Zwerts and his colleagues now provide compelling evidence for the positive impact of FSC measures on animal biodiversity in tropical forests. The researchers placed camera traps with motion sensors in fourteen timber harvesting areas in Congo and Gabon: seven managed by FSC-certified companies and seven comparable areas managed by non-FSC companies. Over a span of two to three months per field site, the approximately thirty camera traps per area together captured 1.3 million photographs.

While the photographs revealed comparable populations of small mammals, like mice and squirrels, in both FSC-certified and non-FSC areas, a different picture emerged when the researchers focused on mammals weighing over ten kilograms: higher numbers of these animals were observed in FSC areas compared to non-FSC areas.

In FSC-forests, 3.5 times more animals weighing between ten and thirty kilograms were observed, such as antelopes and African golden cats. Animals weighing between thirty and one hundred kilograms, such as leopards and chimpanzees, were seen 2.5 times as often. Moreover, animals exceeding one hundred kilograms in weight, such as elephants, were photographed 2.7 times more often.

Across FSC-certified areas, there was an overall 2.7-fold increase in the observations of animals classified as critically endangered species.

Hunting

Zwerts explains that illegal hunting is a significant contributor to the loss of biodiversity in timber harvesting areas. Typically, tropical forests are poorly accessible. For the purpose of forestry, however, roads are constructed as the forests contain many tree species of which only a few are commercially viable for harvesting. These roads open up larger portions of the forests to poachers.

Zwerts adds, "In hunting, the larger mammals are predominantly targeted. Moreover, the populations of these larger animals recover more slowly from hunting than populations of smaller species. This, in turn, has cascading effects, as large animals play vital roles in the forest ecosystem. They contribute to seed dispersal, facilitate nutrient recycling through their droppings, and indirectly influence the carbon storage capacity of the forest."

Various measures are implemented to counter illegal hunting in FSC-certified areas. These include the closure of old roads, the establishment of checkpoints along main routes, and regular patrols by anti-poaching units.

Additionally, protein sources such as meat and fish are introduced to local communities, reducing the necessity for hunting to meet their protein requirements. Zwerts notes, "These measures lead to a higher abundance of large wild animals in FSC-certified areas, resulting in a significant contribution to animal biomass. This, in turn, has a profound impact on the ecosystem."

Adding value

"The study's findings underscore the significant role certification can play in conserving biodiversity in tropical regions," says Van Kuijk. After all, a substantial portion of the tropical forests that still exist today is used for harvesting timber; in total, there are 400 million hectares of timber harvesting area in the world, more than ten times the size of Germany.

While it may appear contradictory, timber harvesting can in fact serve as a means to ensure the continued existence of tropical forests. Zwerts clarifies, "Local communities require income. Extracting hardwood adds value to the forest. Alternatively, if, for instance, soy or oil palms were cultivated in the same area, the forest would be lost, leading to significant consequences for biodiversity."

According to Zwerts, the results highlight the impact consumers can have. "By opting for FSC-certified wood at the hardware store, you actively contribute to the conservation of beautiful and endangered species like forest elephants."

Jaap van der Waarde, who works with WWF Cameroon and is a co-author of the article, adds, "These findings bring encouraging news for FSC-certified companies, indicating that they are heading in the right direction."

Challenging research

Zwerts underscores the unprecedented nature of the study, noting that no prior research had compared such a large number of forestry areas. Zwerts says, "It was a big and ambitious project that spanned five years and involved the collaboration of hundreds of local workers. Convincing both FSC-certified and non-FSC companies to participate was a challenge.

"For each new company, we had to arrange logistics and coordinate workers for field campaigns, repeating the process fourteen times in the remote regions of the Congo Basin. It was demanding work under challenging conditions, but the insights gained will significantly contribute to the conservation of animals in tropical forests."

More information: Joeri Zwerts et al, FSC-certified forest management benefits large mammals compared to non-FSC, *Nature* (2024). DOI: 10.1038/s41586-024-07257-8. www.nature.com/articles/s41586-024-07257-8

phys.org

UK power station still burning rare forest wood

Drax power station in North Yorkshire, England (Credit: Getty Images)

A power company that has received £6bn in UK green subsidies has kept burning wood from some of the world's most precious forests, the BBC has found.

Papers obtained by BBC's Panorama television programme show Drax took timber from rare forests in Canada it had claimed were "no-go areas". It comes as the government decides whether to give the firm's Yorkshire site billions more in environmental subsidies funded by energy bill payers. Drax says its wood pellets are "sustainable and legally harvested".

The Drax Power Station, near Selby in North Yorkshire, is a converted coal plant which burns wood pellets. In 2023, it produced about 5% of the UK's electricity. The site has become a key part of the government's drive to meet its climate targets.

Its owner, Drax, receives money from energy bill payers because the electricity produced from burning pellets is classified as renewable and treated as emission-free.

In fact, the power station emits about 12 million tonnes of carbon dioxide a year, but under international rules the UK doesn't have to count these emissions. All of the 6.5 million tonnes of wood pellets burned by Drax each year are produced overseas. Many come from Drax's 17 pellet plants in the US and Canada.

In 2022, Panorama revealed the company had obtained logging licences in the Canadian province of British Columbia and filmed logs being taken from what the programme said was primary forest to a pellet plant owned by Drax. Primary forests are natural forests that have not been significantly disturbed by human activity.

Panorama has found that Drax has taken whole logs from rare, "old-growth" forests that have been cut down by timber companies. Following the BBC investigation, Drax denied taking wood from primary forests but said it would not apply for further logging licences in the province. However, the company still takes whole logs from forests that have been cut down by timber companies.

Panorama has obtained documents from British Columbia's Ministry of Forests that show the company took more than 40,000 tonnes of wood from so-called "old-growth" forests in 2023. Old-growth is some of the oldest forest which the provincial government says provides "unique habitats, structures and ecological functions".

Satellite image showing an area of old-growth forest cut down in British Columbia

One example is an 87-hectare (215-acre) "cut block" called EM807M – located 180 miles west of the logging city of Prince George – which was all classified as old growth. Although a timber company held the licence to cut down the site, logging records show that Drax took 26% of all the harvested wood.

In total, Drax received 130 lorry-loads of whole logs from the site last winter. The wood was turned into pellets and some were burned at its Yorkshire power plant.

Ninety per cent of the cut block had the even higher classification of "priority deferral area". This category is for old-growth forests that are "rare, at risk and irreplaceable", according to an independent panel of experts in British Columbia. The experts recommended that logging should be paused in priority deferral areas, but it's still legal to cut them down. British Columbia's provincial government says it is working to ensure more old growth is deferred and protected.

Forests 'almost gone'

Drax's use of timber from this "irreplaceable" forest was far from a one-off.

Forestry documents show that in the first nine months of last year the company took wood from 30 different timber marks in British Columbia where more than 25% of the forest had been designated as old growth. Twenty-six of those timber marks included the even rarer priority deferral areas.

Timber marks – codes beaten on to wood by specially made hammers – identify all of the wood cut under individual logging licences on one or more parcels of land. The timber mark paper trail meant Panorama could track logs to Drax's pellet mills.

In total, Drax sourced about 55,000 cubic metres of whole logs – that's more than 1,100 large truck loads – from timber marks containing old-growth forest.

Ecologist Michelle Connolly, from the British Columbia campaign group Conservation North, says making pellets from old forests can never be sustainable. "Old-growth forests in British Columbia are almost gone because of 70 years of logging to feed sawmills and pulp mills, and Drax is helping push our remaining ones off the cliff, along with our native biodiversity," she says.

Drax says it keeps its sourcing policies under review. In response to the latest findings by the BBC, Drax admitted it has taken wood from old-growth forests. But it told Panorama that 77% of the material for its Canadian wood pellets came from sawdust and sawmill residues, with the rest coming from forestry residues and low-grade logs.

A spokesman for the company says that it keeps its sourcing policy and practices under regular review so that they "take account of evolving forest dynamics, legislation, policy, and science". Drax says that it decided in October 2023 to stop sourcing wood from old-growth priority deferral areas, and that "work to implement this decision through the supply chain is ongoing". The company doesn't dispute that it is still taking wood from old-growth sites that are not priority deferral areas.

The burning of wood from old-growth forests contradicts the company's previous claims. In a 2017 report about sustainability, Drax stated it would not take wood from what it called "no-go areas". It said: "We do not take from protected forests, old growth or primary forest, sites that have been classified as having a high biodiversity value." Drax has told BBC Panorama that the 2017 document is "now obsolete" and that its current policy and practices are "more sophisticated".

The company's latest sourcing policy, published in 2019, makes no mention of protecting old growth or primary forest, instead it talks about avoiding "damage or disturbance to high carbon forest". The UK subsidy scheme for Drax Power Station is due to end in 2027, but the government is consulting on plans to extend it to the end of the decade, which could cost bill-payers an additional £4bn.

The company says the emissions released by burning wood are offset by the planting of new trees. But critics say it takes decades for the new trees to grow and that the new forests may never be able to capture that much carbon dioxide.

Drax helps the UK government meet its climate targets because, on paper at least, the power station is treated as emission-free. This is because international carbon accounting rules state that greenhouse gas emissions from burning wood are counted in the country where the trees are felled as opposed to where they are burned. Any additional subsidies would be to support Drax while it tries to install carbon capture technology to reduce emissions at its power station.

Previously, the government's scientific advisors on the Climate Change Committee – an independent non-departmental public body – warned that subsidies for burning wood pellets should not be extended beyond 2027.

bbc.co.uk

Five positive signs for forests in 2024

These top trends are driving increased understanding of the value of forests, more strategic thinking, greater coordination, more resources and new partnerships – all of which are crucial to make this the decade that we end deforestation for good.

World leaders have made a landmark pledge to end deforestation by 2030 but deforestation and forest degradation continue unabated. In 2022, global gross deforestation reached 6.6 million hectares and is particularly worrisome in tropical forests, where an area the size of Denmark has been lost. We're not making anything like the progress required.

So can we turn things around by the end of the decade? It will take a monumental effort but, as we celebrate the annual International Day of Forests, here are five trends that suggest we can do it.

1. Climate and nature agendas are converging – and forests are at the heart of both

We've known for many years that forests are vital allies in combating climate change. We know, too, that forests are crucial for biodiversity, home to around two-thirds of all land-based species. Later this year, Colombia will host the first UN biodiversity Conference of Parties (COP) since the Kunming–Montreal Global Biodiversity Framework came into effect. This will be a chance to see what progress has been made in the two years following the historic agreement by 196 countries to halt and reverse nature loss by 2030.

What's exciting is that, increasingly, leaders are acknowledging that climate and nature are two sides of the same coin. This was recognized at the last UNFCCC Climate COP in a joint statement on climate, nature and people, which affirmed the need "to urgently address climate change, biodiversity loss and land degradation together in a coherent, synergetic and holistic manner" – offering a major boost to efforts to conserve, restore and sustainably manage forests.

2. Global agreements are spurring national-level action

International conferences, treaties and declarations aren't just words – they drive action on the ground. Under the Paris Agreement, every country must submit a climate action plan called an NDC (nationally determined contribution): many have made forests a key part of their NDCs, as well as their related climate adaptation plans.

Similarly, under the Kunming-Montreal Global Biodiversity Framework, countries must develop a national biodiversity strategy and action plan (NBSAP). This offers huge opportunities for forests as countries seek to meet globally agreed targets, such as effectively protecting at least 30% of all land and sea by 2030.

Importantly, NDCs and NBSAPs are regularly reviewed and updated, and we're seeing increasing efforts to align them and develop solutions that benefit people, nature and the climate together.

3. Indigenous rights and roles are gaining recognition

Indigenous Peoples have been guardians of nature for countless generations. Their ancestral forests and other ecosystems cover a quarter of the world's land surface but hold up to 80% of its remaining biodiversity. Research shows that Indigenous lands are at least as effective as formal protected areas in preventing deforestation and forest degradation. Yet Indigenous Peoples and local communities formally govern only 10% of their lands and waters, and for too long they've been sidelined in debates and decisions on conservation and development.

Encouragingly, this is beginning to change, with coalitions of Indigenous Peoples becoming more prominent on the global stage and in country-level decision-making. Globally, there is growing recognition of the important roles and contributions of Indigenous Peoples as ***partners*** in the conservation, restoration, and sustainable use agenda. Importantly, there's increased recognition that Indigenous rights and knowledge must be respected and their efforts supported if we are to meet the 30x30 target.

Last year, I was privileged to witness first-hand how partnerships with Indigenous communities are helping to conserve the Amazon rainforest in Ecuador – just one of many examples that point to a new way forward.

4. New finance for forests is emerging

Despite various government pledges, finance for forests falls far short of what's needed to end deforestation by 2030, with just US$2.2 billion of public funds channeled into forests each year. For comparison, more than 100 times this amount is spent on environmentally harmful subsidies, including those which actively encourage deforestation. Repurposing these – as countries have pledged to do – could go a long way towards plugging the forest finance gap, estimated at $460 billion annually.

Other mechanisms are emerging capable of channelling finance at scale towards forest conservation, restoration and other nature-based solutions, particularly in developing countries such as those of the Congo Basin. Climate-related finance is one important area – including voluntary carbon markets, which have come under much-needed scrutiny over the past year. While rigorous, credible carbon credits still have a role to play, they should never be seen as a substitute for reducing greenhouse gas emissions, and it's important to look at other sources of finance.

I've just returned from Cameroon, where I met with representatives from the Central African Forests Commission (COMIFAC), to explore what financial mechanisms would best fit the needs of the countries to preserve their forest. Last year, we jointly commissioned Climate Focus to assess finance options for high integrity forests and now we are moving towards feasibility assessments for some of the more promising mechanisms.

5. Private sector efforts are gathering momentum

Forestry companies, agribusinesses and the companies that buy from them have a huge impact on forests – but can be a force for good too. Members of our Forests Forward platform are having positive impacts on forests through responsible sourcing, improved forest management and investing in forest landscapes. And many leading businesses, and the banks and finance institutions that back them, have committed to deforestation-free supply chains.

Adding weight to these voluntary initiatives are new regulations like the EU Deforestation Law, which makes it illegal to sell products linked with deforestation on the EU market. Under the Global Biodiversity Framework, large businesses and financial institutions will have to assess and disclose their risks, impacts and dependencies on biodiversity by 2030 – something that we campaigned for alongside more than 400 businesses with revenues of over US$2 trillion.

Together, these trends are driving increased understanding of the value of forests, more strategic and joined-up thinking, greater coordination, more resources and new partnerships – all of which are crucial to make this the decade that we end deforestation for good.

wwf.panda.org

Previously logged forests struggle to thrive, even with restoration, study finds

- *A newly published study has found that seedlings in previously logged forests in Borneo struggle to survive compared to those in intact forests, even with restoration efforts.*
- *Researchers monitored more than 5,000 seedlings for 18 months in three types of landscapes – unlogged forest, naturally regenerating logged forest, and actively restored logged forest – and found the benefits of restoration efforts diminished over time.*
- *The study suggests that changes in canopy structure, microclimate, soil, low genetic diversity of planted trees, excessive herbivory, and failure to restore soil conditions may contribute to the stress experienced by seedlings in logged forests.*
- *The low survival rates of seedlings, even 30 years after selective logging, raise concerns about the long-term recovery of biodiversity and the ability of future tree generations to thrive in human-modified tropical forests worldwide.*

Young trees face significant challenges surviving in previously logged forests compared to intact forests, even in areas with active restoration efforts, according to a recent study.

An endangered long-tailed macaque (Macaca fascicularis) in Borneo. (Credit: John Cannon/Mongabay).

The findings, published in the journal *Global Change Biology*, raise concerns about the long-term recovery of biodiversity in logged forests. This concern is growing as human-modified forests now exceed primary forests by area in the tropics.

The research team, led by Robin Hayward at the University of Stirling in Scotland, monitored more than 5,000 seedlings for 18 months in the Danum Valley Conservation Area and the surrounding Ulu Segama landscape in Malaysian Borneo.

They compared seedling survival and diversity in unlogged forests, naturally regenerating logged forests, and actively restored logged forests that had been selectively logged 30–35 years ago.

Following a mast fruiting event, where many trees produced a lot of fruit all at once, the researchers saw many seedlings in the unlogged and logged forests. However, as time passed, the benefits of the restoration efforts started to fade. By the end of the study, the survival rate of seedlings in the restored forests was significantly lower than in the unlogged forests and was similar to the logged areas recovering naturally.

"Our findings suggest that seedlings are experiencing stress in logged forests," said study co-author David Bartholomew, from the University of Exeter in the U.K. "This could be due to changes to the canopy structure, microclimate, and soil, with current restoration treatments insufficient to eliminate this stress."

The study also found that trees in logged forests grew and functioned differently than trees in unlogged forests. This might mean that some types of trees have a hard time adapting to the changes in their environment after logging or that they have to change the way they grow to deal with the new conditions. These findings suggest the potential for long-lasting changes in biodiversity and ecosystem function in recovering forests.

"After such a productive fruiting event in the restored forest, it's disappointing that so few were able to survive – and to think what this might mean for the long-term recovery of different tree species," Hayward said.

Even though people have tried to help logged forests recover by planting trees and managing the forest, these efforts didn't seem to help the seedlings survive better in this case. The researchers say this might be because the planted trees have low genetic diversity, too many animals are eating the seedlings, or because the soil hasn't been restored properly.

The study's authors say it's important to keep researching and monitoring these forests to ensure restoration efforts are helping them recover over long periods. They also point out that the field of restoration ecology is still fairly new, with restoration only being included in the official targets of the Convention on Biological Diversity in 2010.

"While logging in the tropics is unlikely to stop anytime soon, it is important to know that the problems it causes can persist for decades and that post-logging restoration activities can also cause problems," Francis E. Putz, a researcher with the Forest Research Institute at the University of the Sunshine Coast in Australia, who was not involved in the study, told Mongabay in an email. "My concern is that so much more attention is paid to describing problems than to seeking solutions."

Selective logging, where only certain trees are cut down, is common in tropical forests worldwide. The low survival rates of seedlings in this study, even 30 years after logging, raise concerns about whether future generations of trees will be able to thrive.

While this study gives us an idea of the challenges logged forests face in Borneo, more long-term research is needed to fully understand the effects of logging and figure out the best ways to help seedlings survive.

Citation:

Bartholomew, D. C., Hayward, R., Burslem, D. F., Bittencourt, P. R., Chapman, D., Bin Suis, M. A. F., … Dent, D. (2024). Bornean tropical forests recovering from logging at risk of regeneration failure. *Global Change Biology*, *30*(3), e17209. doi:10.1111/gcb.17209

news.mongabay.com

Forests with rich tree diversity adapt better to changing climate

Climate change, often seen as a formidable adversary, poses a significant threat to humanity and the natural environment, particularly impacting the diversity of our vital forests.

Historical research has painted a grim picture, highlighting a decline in forest productivity amidst global warming and persistent droughts, suggesting a precarious future for these diverse ecosystems.

A recent collaborative study involving researchers from multiple international institutions, including Kyoto University, has shed light on a hopeful scenario.

They discovered that forests characterized by high trait diversity are not only better equipped to cope with climate change, they may actually flourish under such conditions.

Diversity's role in forest health

Led by Han YH Chen from Lakehead University, the research team delved into the significance of tree functional trait diversity. This crucial aspect of biodiversity enhances the ability of forests to adapt to environmental stressors.

Their findings stem from an extensive analysis of 57 years of inventory data collected from dryland biomes across Canada, spanning from 1958 to 2015.

"In the face of environmental stress, these diverse trees have been shown to maintain higher productivity levels, in contrast to monoculture forests," Chen explains.

Consequently, this study underscores the resilience that diversity can confer to forest ecosystems, particularly in dryland areas which are notoriously susceptible to climate impacts.

Climate change and future forest management

The study meticulously accounted for variables such as vegetation recovery from natural disturbances, local climate variations, and soil drainage characteristics.

This robust statistical approach not only highlights the resilience of diverse forests but also paves the way for future explorations into the long-term dynamics of terrestrial ecosystems and biodiversity.

"Our robust statistical approach to the large-scale data may lead to future opportunities for further exploring the long-term dynamics of terrestrial ecosystems and biodiversity," said Masumi Hisano, the first author of the study and affiliated with Hiroshima University.

Natural forest diversity impact

The concept of nature-based solutions is gaining momentum within climate policy circles as a means to mitigate ecosystem vulnerabilities.

Furthermore, this study contributes to the ongoing debate about the ability of biodiversity to enhance ecosystem resistance against short-term droughts and other climatic adversities.

"Due to limited evidence from multi-decade long-term observation, synthesizing several direct observations is essential for generalizing dynamic ecological patterns," Hisano noted.

Cultivating hope through ecological diversity

The study illuminates the intricate relationships among forest diversity, how ecosystems operate, and the impacts of climate change. It highlights how various species within a forest interact and support each other, enhancing the whole ecosystem's ability to withstand climatic shifts.

These findings offer promising strategies for strengthening forest resilience, emphasizing the importance of maintaining a wide range of species.

By encouraging diversity, forests are better prepared to face environmental changes, potentially leading to healthier and more robust ecosystems.

As the severity of climate challenges increases, the role of diverse forests becomes increasingly critical. Their health and endurance are essential for their own survival and for the countless species, including humans, that depend on them.

In summary, preserving diverse forest ecosystems is pivotal for maintaining biodiversity, ensuring ecosystem services, and supporting overall planetary health.

Additional benefits of rich forest diversity

Forest diversity offers numerous benefits beyond enhancing resilience to climate change. Here are some key advantages:

- **Increased productivity**: Diverse forests often exhibit higher productivity than monocultures because different species utilize resources such as light, water, and nutrients in varying ways, reducing competition and increasing overall efficiency.
- **Disease and pest resistance**: A diverse forest is less susceptible to pests and diseases. With a variety of species, it's less likely that all will be affected by the same threats, preventing widespread devastation.
- **Improved soil health**: Different trees contribute differently to soil structure and nutrient content. This variety helps in maintaining healthy soil, which supports more robust plant growth and better water retention.
- **Wildlife habitat**: Biodiversity in forests provides varied habitats, which can support a wider range of wildlife. This is crucial for maintaining ecological balances and supporting species survival.
- **Cultural and recreational value**: Diverse forests attract more tourists and nature enthusiasts, providing recreational, educational, and aesthetic benefits. They are also vital to many cultures that rely on various forest species for traditional practices and medicines.
- **Carbon sequestration**: Forests with a high diversity of tree species have been shown to store more carbon than less diverse forests, playing a critical role in mitigating global warming.
- **Water cycle regulation**: Forests influence local and regional water cycles. Diverse forests are more effective at regulating water flow and purification, contributing to cleaner rivers and streams and more consistent rainfall patterns.
- **Resilience to fire**: Diversity can reduce the vulnerability of forests to fires by including species that are less flammable or that can help to regulate the forest microclimate.

These benefits highlight the importance of preserving and promoting forest diversity as part of broader environmental conservation and sustainability efforts.

The full study was published in the journal *Science Advances*.

earth.com

How Congo's trees are smuggled through East Africa

The Africa Report's exclusive four-part investigation into timber trafficking from the Democratic Republic of Congo, in collaboration with the Pulitzer Center Rainforest Investigations Network

Full 4-part series here or https://www.theafricareport.com/in-depth/how-congos-trees-are-smuggled-through-east-africa/

Criminals in East Africa are exploiting the multiple conflicts in the north-east of the DRC to allow the trafficking of its protected hardwoods.

The key economies in the East African Community – Kenya, Rwanda, Tanzania and Uganda – are all benefiting from this timber trafficking and flagrantly breaking their environmental pledges. The illicit trade is facilitated by 'big men' close to security services and politicians across the region – they ensure the border controls fail.

Corrupt payments by the loggers and truckers to border checkpoints oil the wheels of the trade, where fake certificates of origin are produced for a large fee.

These timber smuggling rackets are wrecking the ecology of the Congo basin and its contribution to the fight against uncontrolled global warming.

Over 90% of the timber traded through Congo Park had no legal logging permits according to the Center for International Forestry Research.

Hundreds of millions of dollars of protected African hardwoods have been looted from the DRC and smuggled into Kenya, Rwanda, Tanzania and Uganda over the past two decades.

Kenyan business people are the major winners in Congo timber trafficking, taking ten times more contraband timber than neighbouring Uganda.

The Lia link

As dusk falls over the bustling border point of Lia, the exchange of freshly sawn hardwood timber between the Democratic Republic of Congo (DRC) and Uganda paints a picture of a thriving, yet shadowy trade.

This bustling activity, underpinning a flourishing business that stretches across East Africa, belies the untold stories of

exploitation, environmental degradation, and the perilous journey of Congolese timber.

Despite official protection for species like African mahogany under international conventions, the lack of scrutiny at borders like Lia allows for a seamless flow of this valuable resource, often at a great cost to the environment and local communities.

This investigation, grounded in interviews, satellite imagery, and on-the-ground reporting, explores the lucrative illegal logging supply chain. From Lia, a seemingly innocuous rural community transformed by the timber trade, to the intricate web of buyers and sellers that span several African nations, each story sheds light on the different facets of this complex issue.

The series reveals not just the mechanics of the trade but the human stories intertwined with the forests of the Congo Basin – stories of hope, despair, and the relentless pursuit of prosperity at any cost.

At the core of this series is a critical examination of the legal and regulatory frameworks – or the lack thereof – that govern the timber trade in this region. With insights from local politicians, timber dealers, and conservation experts, the investigation navigates the murky waters of corruption, weak governance, and the environmental policies that fail to protect some of the world's most vital ecosystems.

As the series unfolds, it becomes evident that the issue of timber trafficking is not just an environmental concern but a reflection of broader socio-economic challenges that require a concerted, cross-border solution.

COMING UP, IN THIS INVESTIGATION:

1) Timber hustling: Lia, a thriving hub for Congolese mahogany trafficked to Uganda, Kenya or https://www.theafricareport.com/341713/timber-hustling-lia-a-thriving-hub-for-congolese-mahogany-trafficked-to-uganda-kenya/
2) 'Big men', an ugly history and the ruthless Congo Basin timber smuggling business or https://www.theafricareport.com/341912/big-men-an-ugly-history-and-the-ruthless-congo-basin-timber-smuggling-business/
3) In Kampala, 'Made in Uganda' furniture pride obscures 'open secret' of illicit Congolese timber or https://www.theafricareport.com/341984/in-kampala-made-in-uganda-furniture-pride-obscures-open-secret-of-illicit-congolese-timber/
4) Kenya talks big on climate, while illegal timber flows in daily from the DRC or https://www.theafricareport.com/342055/kenya-talks-big-on-climate-while-illegal-timber-from-ancient-trees-flows-in-daily-from-the-drc/

theafricareport.com

Deforestation in Indonesia spiked last year, but resources analyst sees better overall trend

A hill that has been cleared from trees to make way for a corn plantation is visible in Polewali Mandar, South Sulawesi, Indonesia, Saturday, April 20, 2024. From trees felled in protected national parks to massive swaths of jungle razed for palm oil and paper plantations, Indonesia had a 27% uptick in primary forest loss in 2023 from the previous year, according to a World Resources Institute analysis of new deforestation data. (AP Photo/Yusuf Wahil)

JAKARTA, Indonesia – From trees felled in protected national parks to massive swaths of jungle razed for palm oil and paper plantations, Indonesia had a 27% uptick in primary forest loss in 2023 from the previous year, according to a World Resources Institute analysis of deforestation data. But the loss is still seen as historically low compared to the 2010s, it said.

"Deforestation has been declining from six or so years ago, when there were peak rates," said Rod Taylor, global director of the forests program at WRI. "It's good news and commendable for Indonesia."

But others saw cause for concern in the uptick, and tied some of the more recent deforestation to the world's appetite for mining Indonesia's vast deposits of nickel, which is critical for the green energy transition. The latest data from the University of Maryland's Global Land Analysis and Discovery laboratory was shared on Global Forest Watch – a platform run by WRI that provides data, technology and tools for monitoring the world's forests.

A vast tropical archipelago stretching across the equator, Indonesia is home to the world's third-largest rainforest, with a variety of endangered wildlife and plants, including orangutans, elephants and giant forest flowers. Some live nowhere else.

Since 1950, more than 74 million hectares (285,715 square miles) of Indonesian rainforest – an area twice the size of Germany – have been logged, burned or degraded for development of palm oil, paper and rubber plantations, nickel mining and other commodities, according to Global Forest Watch. Indonesia is the biggest producer of palm oil, one of the largest exporters of coal and a top producer of pulp for paper. It also exports oil and gas, rubber, tin and other resources.

Expansion of industrial plantations occurred in several locations adjacent to existing palm oil tree and pulp and paper plantations on the tropical islands of Kalimantan and West Papua, according to the analysis. The Indonesian Ministry of Environment and Forestry said the expansion occurred in concessions granted before the current administration took office in 2014.

The Indonesian Ministry of Environment and Forestry did not respond to questions and a request for comment sent by The Associated Press.

Global Forest Watch's data on Indonesia's loss of primary forests – which are old-growth forests typically high in stored carbon and rich in biodiversity – are higher than the official Indonesian statistics. That's because much of the primary forest loss in Indonesia, according to the analysis, is within areas that Indonesia classifies as secondary forest – areas that have regenerated through largely natural processes after human actions such as agriculture clearing or timber harvest. Secondary forests typically have reduced capacity for storing carbon than primary forests.

Deforestation linked to the mining industry occurred in Sumatra, Sulawesi, Mlauku and Kalimantan, according to the analysis. Indonesia has the world's largest reserves of nickel – a critical material for electric vehicles, solar panels and other goods needed for the green energy transition. And part of this deforestation can be directly linked to the expansion of Indonesia's nickel industry, said Timer Manurung, director of Auriga Nusantara, a nongovernmental conservation organization based in Indonesia.

Manurung said it's not clear exactly how much of Indonesia deforestation is due to mining. But he called it a "significant driver," and said the government's rapid development of the country's mining and nickel industry – including more than 20 new smelters to process the nickel ore – is "repeating Indonesia's oil palm and pulpwood mistakes" of increasing deforestation.

But Taylor noted that deforestation done on a massive scale seems to be shrinking, compared to the past.

In the 2010s there was gargantuan oil palm, timber and large-scale plantation expansion across Indonesia. Research in the Nature Climate Change journal found that the deforestation rate doubled to approximately 2 million hectares per year during 2004–2014. In 2023, primary forest loss in patches greater than 100 hectares made up just 15% of the loss, according to the analysis.

Taylor attributes this lack of large-scale deforestation patches to the reputational risks that companies face if they are found to be razing trees. In recent decades nongovernmental organizations, consumers and governments – including the European Union – have pushed for companies to move away from deforestation practices.

In 2018 Indonesian President Joko Widodo put a three-year freeze on new permits for palm oil plantations. And the rate of deforestation slowed between 2021–2022, according to government data. But small-scale primary forest loss was still prevalent throughout the country, including within several protected areas such as Tesso Nilo National Park and Rawa Singkil Wildlife Reserve on the island of Sumatra. Both areas are home to critically endangered animals such as tigers and elephants.

A wetter than usual El Nino – which usually leads to less rainfall and higher temperatures that can cause rapid spread of fires set to clear land for agriculture – contributed to a quieter than expected fire season, Taylor said. So did investments made by the Indonesian government in fire prevention capabilities, as well as efforts to suppress fire by local communities.

During Indonesia's last El Nino in 2015–2016, fires intentionally started to clear land for agriculture rapidly spread, sending haze across Southeast Asia. Several Indonesian provinces declared states of emergencies, respiratory illnesses spiked and thousands of Indonesians had to flee their homes.

"The good news in Indonesia is that the fire prevention measures are much more sophisticated than they were in years past," said Taylor. "It's really making a difference."

Washingtonpost.com

Publications

Grow your knowledge: Celebrate the International Day of Forests with innovative education tools

The Global Forest Resources Assessment (FRA) invites you to explore the fascinating world of forests through innovative virtual learning.

The International Day of Forests raises awareness on the importance of all types of forests, a motivation that resonates closely with the aim of FRA to provide essential information on the extent, condition, management and use of forest resources. For the 2024 theme of "forests and innovation", join FRA on a journey to see how forward-thinking education can change the world. Every kind of learner is welcome, from bookworms to gamers, to grow with these inventive and engaging knowledge products.

To mark this momentous occasion, take FRA's latest e-learning course that launched today on monitoring Sustainable

Development Goal (SDG) 15 with land-cover information, developed in collaboration with the United Nations Convention to Combat Desertification (UNCCD) and the Land Degradation Neutrality Flagship of the Group on Earth Observations (GEO-LDN), as well as with the support of the German Development Cooperation (GIZ).

Explore a world of knowledge

Peer into a virtual library of fascinating resources to better understand fundamental topics in forest monitoring and management, the diverse types of forests and the state of forests around the world.

Uncover essential data on technical forestry topics with self-paced online courses:

- Using land-cover information to monitor progress on SDG 15: Earn your badge in land-cover data and its use for monitoring progress towards the achievement of international goals.
- SDG indicators 15.1.1 and 15.2.1 – Forest area and sustainable forest management: Take this course in English, French or Spanish to understand the role of forests and reporting on forest-related data.
- Forest monitoring for climate action: Dive into this e-learning series packed with fundamental material such as forest transparency under the Paris Agreement and national forest inventories.

Embark on immersive adventures through interactive stories that bring forests and facts to life:

- Unlocking the secrets of mangroves: Discover the definition of mangroves, their many benefits and the state of these important ecosystems from 2000 to 2020.
- Exploring our forests: View our forests from two perspectives for fascinating insights into the vital role they play in our lives.
- A fresh perspective FRA2020: Inspect the status and trends of forest resources across 236 countries and territories from 1990 to 2020.
- Hidden in plain sight: Check out the first global assessment on trees, forests and land use in drylands to see their considerable economic potential and environmental value.

Investigate comprehensive publications for an exploration of the latest captivating forestry topics:

- Good practices in sample-based area estimation: Find out how sample-based area estimation can generate activity data for REDD+ by reading this informative white paper.
- The world's mangroves 2000–2020: Read the first participatory global study on mangroves and their dynamics to understand the drivers of global, regional and subregional changes over two decades.
- How much do large-scale and small-scale farming contribute to global deforestation?: Review this study on agriculture-based deforestation, including both crop and livestock production.

Moreover, test your knowledge and discover forests in a fun and novel way with an exciting game for young learners: Forest Kids. This educational game is playable on iOS devices, Android devices and online in six languages to help children from around the world learn about forests through engaging quests.

Protect our planet

By learning virtually with FRA's interesting and innovative materials, you will gain valuable knowledge about forests without leaving a paper trail. Celebrate the International Day of Forests and take a stand for the Earth – explore the wonders of these vital ecosystems today.

For more information visit: Celebrate the International Day of Forests with innovative education tools | 全球森林资源评估报告 | 联合国粮食及 农业组织 (fao.org)

How climate change could impact forests

Dr. Tana Wood, an ecologist with the U.S. Forest Service, is running experiments to see what might happen to forests if temperatures rise by seven degrees Fahrenheit, the worst-case scenario by the end of the century. Among the impacts, it appears forests could lose some of their ability to absorb carbon, which contributes to rising temperatures.

More information at How climate change could impact forests – CBS News

Should forests have rights? – podcast

A growing movement of ecologists, lawyers and artists is arguing that nature should have legal rights. By recognising the rights of ecosystems and other species, advocates hope that they can gain better protection. Madeleine Finlay speaks to the Guardian's global environment editor, Jonathan Watts, about where this movement has come from and why the UK government has dismissed the concept, and hears from Cesar Rodriguez-Garavito of NYU School of Law about how he is finding creative ways to give rights to nature.

Click Should forests have rights? – podcast | Science | The Guardian or visit https://www.theguardian.com/science/audio/2024/mar/19/should-forests-have-rights-podcast

Around the World

Indonesia: World's largest forestry offsets project has license revoked

The future of one of the world's largest carbon offsets projects is in doubt, after the Indonesian government revoked its license for violating local regulations. The Ministry of Environment and Forestry's action covers more than 36,000 hectares (88,958 acres) in Central Kalimantan, on the island of Borneo. The area is part of a project that has issued more than 30 million credits since 2013, according to data from non-profit CarbonPlan.

The government cited the license-holder, PT Rimba Raya Conservation, for three offenses: The company transferred its license to a third-party without ministry approval, operated beyond its sanctioned area, and failed to make required payments to the state, according to a statement from the ministry in March.

Given the project's scale, the government's action creates potential consequences for carbon exchanges, traders, and companies that have bought Rimba Raya credits to offset emissions. It also highlights the risks that can be obscured by multiple participants, and the threat of emerging and rapidly changing government regulations.

Carbon offsets are a key component of tackling climate change, allowing polluters to counter their emissions by buying credits from projects like forest reserves in Indonesia. Prices for the credits are expected to soar over the next few decades, creating a market that could be worth as much as $1 trillion by 2050, according to BloombergNEF.

In recent years, the voluntary carbon market has come under scrutiny for overblown green claims. Last year, the world's top seller of carbon credits parted ways with its chief executive officer, following months of allegations that the company overstated the climate impact of the products it sold.

bnnbloomberg.ca

USA: Forests can generate revenue while serving ecosystems, salmon and people

Nisqually Community Forest is a community-based, sustainable forestry pioneer. Recently, as we moved from acquiring land to managing stands and watersheds, we show that it's possible to sustain local economies and local ecosystems.

Founded in 2011, Nisqually Community Forest was the first community forest in the Puget Sound region and second in the state. We were motivated by data showing that by raising the average age of forests, we could provide more water to salmon streams.

With the help of our parent organization, Nisqually Land Trust, and the Nisqually River Foundation, Northwest Natural Resource Group, Washington Conservation Action and Conservation Northwest, we expanded to 2,600 acres along the Mashel River and Busy Wild Creek, sheltering some of Washington's best salmon and steelhead habitat.

As partners with the Nisqually Tribe, which has forestland adjacent to ours, together we manage approximately 5,500 acres in the Nisqually Watershed, which has headwaters in Mount Rainier National Park and extends to southern Puget Sound. Eventually, we'd like 30,000 acres under management.

"Sustainable forestry" means different things to different people. What do we mean by it?

First, we're thinning overly dense stands resulting from management decisions made prior to our ownership. Most of our forest was replanted at the standard working forest density of 350 trees per acre. Now many stands have doubled or tripled that density due to infill. A dense forest doesn't really work for nature or people.

Our forest management plan has us selectively take smaller trees, leaving larger ones to become structure for a more complex ecosystem. We began thinning in 2018 using local contractors. We create local jobs, sell wood to local mills, send what wouldn't work for lumber to Washington paper mills, and sell boughs to the local holiday-wreath market. We also sell "fish logs" that are used in salmon-stream restoration and usually bring in three times the price of mill logs.

We manage stands along riparian areas and very steep slopes to let them develop into old-growth successional areas. In the other stands, we thin a portion of trees every 15–25 years, resulting in complex stands with benefits for fish and wildlife. Over time, our longer harvest cycle results in far more valuable logs than those from trees grown on shorter cycles. In the interim, the trees provide habitat for wildlife and store carbon that might otherwise be released into the atmosphere.

Our forest also provides a landscape for skiers, snowshoers and others who enjoy the outdoors. Mount Tahoma Trails Association has ski trails on our land and a ski hut on the adjacent Nisqually Land Trust property. We hope to have a system for hunting reservations this year.

We hope to create a forest that has stands of varying species and ages. Research shows that this kind of forest creates more diversity for birds and wildlife. Healthy forests like this also shade streams and preserve snowpack that feeds streams during the summer months. That's good for people and for fish.

We've analyzed how the forest affects the water table and stream flows. This is important because our streams feed salmon habitat and affect water quality in Puget Sound.

Some results are intuitive: A stream bounded by 100-year-old trees has nearly three times more water in August than one shaded by 20-year-old trees. Older trees retain and release water more evenly.

Some results are surprising. We and our partners received a grant to study how forest gaps affect snowmelt. One might think snow melts faster in an open gap than in dense drifts shaded by young trees. We found the opposite: The drip lines of those young trees make snow melt faster. Snow lingers much longer in gaps. Because of these findings, we're thinning aggressively to create more gaps.

This sustainable forest management can generate revenue while preserving complex ecosystems, feeding salmon streams, and supporting our local communities. That's a win for nature and people.

Justin Hall is executive director of the Nisqually River Foundation. He serves on the boards of the Nisqually Community Forest, the Northwest Community Forest Coalition, the Friends of the Nisqually National Wildlife Refuge Complex, and AgForestry Leadership.

ca.news.yahoo.com

USA: Coming soon to Manhattan, a brand-new tiny forest

A trend that's gaining momentum around the world is set to finally arrive in Manhattan. It's a tiny forest, to be planted on the southern end of Roosevelt Island, in the East River, this year. According to its creators, it would be the first of its kind in the city and would consist of 1,000 native plants, trees and shrubs, covering just 2,700 square feet.

"We're an island. We think about flooding, we think about storm surge, and the best treatment is to plant a tree," said Christina Delfico, founder of iDig2Learn, a nonprofit group that works to reconnect people with nature and that is helping to lead the project. "The roots will stabilize the land. With good soil, there won't be flooding. The concrete jungle needs pocket forests."

Called the Manhattan Healing Forest, it will be planted using the Miyawaki method, which was created by the Japanese botanist and plant ecologist Akira Miyawaki, who received the Blue Planet Prize, a top environmental award, in 2006 for his work restoring forest ecosystems. First, the land is painstakingly prepared, usually with compost and mulch. Then, native trees and shrubs are planted close together, encouraging the flora to rapidly grow. According to proponents, Miyawaki-style forests become self-sufficient within three years and can achieve maturity within a few decades. Along the way, they provide habitat for insects and wildlife, absorb carbon and clean the air.

Image

Mini-forests have been planted by the thousands across the world, in cities in Europe, Africa, South America, Asia, Russia and the Middle East. Many of the forests are barely the size of tennis courts, yet their creators report a range of benefits, including a cooling effect in warm weather, floodwater absorption, and even the return of birds that local residents thought had vanished.

In the United States, Miyawaki-style forests have been planted in recent years in Los Angeles, Washington State and Cambridge, Mass. One Cambridge mini-forest was planted in Danehy Park, atop an old landfill, and was growing at a rate that the city's superintendent of urban forestry and landscapes described as "phenomenal."

The Roosevelt Island mini-forest will be the 200th such forest planted by SUGi, a foundation that plans to cover the costs, which generally average about $200 per ten square feet. White oak, Virginia strawberry, butternut, New York fern and eastern white pine will be among the 40 species planted, according to Elise van Middelem, SUGi's founder. The forest will be planted in Roosevelt Island's Southpoint Park atop a large unused garden bed, according to Ms. Delfico.

nytimes.com

China: Multiple processes shape plant ecological uniqueness in Northeast China's forests

In a study published in *Journal of Biogeography*, scientists from the Institute of Applied Ecology of the Chinese Academy of Sciences have shed light on understanding the driving mechanisms of the uniqueness of plant species composition in different life forms.

Ecological uniqueness emphasizes the distinctiveness of species composition in different locations. Higher uniqueness is often accompanied by a higher proportion of rare or endemic species, which is crucial for biodiversity conservation practices.

Four potential drivers of the distribution of ecological uniqueness have been hypothesized: Regional Climate Hypothesis, Local Environment Hypothesis, Biotic Heterogeneity Hypothesis, and Human Disturbance Intensity Hypothesis. However, the relative importance of the four hypotheses is still unclear, and there is a lack of comparison between different plant life forms.

To this end, the researchers investigated approximately 800 temperate forest plant community plots in northeast China. They used multivariate statistical regression and structural equation models to study the local-scale distribution pattern of ecological uniqueness of different life forms (trees, shrubs and herbs) and the differences in the influence effects of the above four processes between different life forms.

They found that the ecological uniqueness of different plant life forms was consistently high in the south of the study area and relatively low in the north. The four hypotheses mentioned above jointly influenced the spatial distribution of the ecological uniqueness of plant life forms, but their relative importance was different among different plant life forms.

Overall, the regional climate hypothesis had a dominant effect on the ecological uniqueness of tree species, while the biotic heterogeneity hypothesis mainly affected the distribution of ecological uniqueness of shrub and herb plants. The local environment and human disturbance intensity hypotheses had relatively weaker effects than the other two hypotheses. Human disturbance intensity had a significant effect only on the ecological uniqueness of herbs.

In addition, regional climate, local environment and human disturbance also indirectly shaped the distribution pattern of plant ecological uniqueness by changing biotic heterogeneity, according to the researchers.

phys.org

USA: Native Hawaiian organizations to benefit from $12M in new reforestation funding

Privately owned or managed forests comprise 66% of forest cover in Hawai'i, but when it comes to funding for new climate and environmental initiatives, traditionally underserved communities are often overlooked.

In efforts to make reforestation more affordable and accessible for underserved landowners, American Forests has received a $12 million investment from the USDA Forest Service.

With funds awarded through its Forest Landowner Support Program, the investment will support 10 tribes and Native Hawaiian organizations seeking to restore damaged forests, resulting in more than 2 million trees planted and over 1 million metric tons CO_2e removed from the atmosphere, announced American Forests.

"This USFS Funding through American Forests will advance the opportunities for Hawai'i underserved landowners to access innovative funding streams related to native forestry, carbon markets and water benefits," said Dr. Natalie Kurashima, integrated resources manager at Kamehameha Schools. "Access to these emerging markets is critical to accelerate the much needed landscape-level stewardship of our islands' imperiled and unique forests."

"This partnership with American Forests will enable us to explore innovative mechanisms to support ecosystem restoration strategies which yield clean and abundant water for people and ecosystems across Hawai'i," said Dr. Leah Bremer, assistant specialist and conservation scientist University of Hawai'i Economic Research Organization.

American Forests has announced it and partners like the Hawai'i carbon hui and the University of Hawai'i will provide technical assistance, including project planning, implementation and monitoring, integrating Indigenous knowledge with the best available climate science to help create ecologically-rich forests that can adapt to the stressors of a changing climate, including drought and wildfire.

These funds are also intended to help underserved forest owners to create new sources of revenue. Landowners who restore damaged forestlands and help create forests with greater resilience to climate change stressors can be compensated by private markets for the ecological benefits of the healthy natural resources they support. The income from private markets for resilient reforestation helps protect healthy forests in the long-term by generating funds that landowners can reinvest in their forests. Those private markets include markets for carbon, clean water and biodiversity.

The award is one of twenty that will be receiving a total of $116 million from the Forest Service through the Forest Landowner Support Program. Funded by the Inflation Reduction Act, the program is investing $145 million in organizations that support underserved and small-acreage forest owners.

mauinow.com

Global: Innovative technology to evaluate forest damage helps with rapid response after hurricanes

With Hurricane Preparedness Week kicking off today, University of Florida Institute of Food and Agricultural Sciences researchers are preparing for hurricane season with state-of-the-art monitoring equipment that will help them determine how extensively forests are damaged during individual hurricanes.

When hurricanes careen through Florida, they not only damage homes and businesses, they also destroy forests and timber farms. Getting an accurate assessment for how much timber is damaged by hurricanes is essential for environmental management decisions, salvaging logging operations, tree farms' insurance estimates and climate change studies, but so far, it's been a vexing puzzle.

Carlos Silva, assistant professor of quantitative forest science in the UF/IFAS School of Forest, Fisheries and Geomatics Sciences and director of the forest biometrics, remote sensing and AI lab, said the key is to use a combination of remote sensing and artificial intelligence technologies, to create pre- and post-hurricane 3D maps of forests to evaluate forest loss. He uses satellites and lidar – a technology that uses lasers to collect data and which stands for Light Detection and Ranging – ground equipment to achieve this.

"Hurricanes pose a fundamental challenge for us in Florida," Silva said. "The traditional way to assess the impact of hurricanes is basically going to the field, establishing plots and measuring trees. But if we're thinking about large areas, it's really time-consuming, therefore the traditional way of assessing impact of hurricanes on forest ecosystems is not efficient."

"We are in a new era for monitoring forests, thanks to these innovative remote-sensing and AI methods," he said.

Data help emergency managers and environmental managers make fast, smart decisions in the aftermath of a hurricane, he said. These data help them know which areas were most affected and need help immediately, as well as which would benefit from specialized action at a later time – such as where to do salvage logging operations.

Kody Brock, a senior in Silva's lab, said the maps can help forest managers and landowners alike react quickly to hurricane damage.

"Hurricanes are only going to get worse and more frequent," she said, "and we realize that in the field of forestry. Those are ecosystems we're losing."

According to Colorado State University's hurricane forecasting team, hurricane season 2024 is shaping up to be an active one. The team is forecasting 23 storms. Of that, 11 will be hurricanes and five will be Category 3 or stronger.

Silva and his lab used NASA satellites, specifically the Global Ecosystem Dynamics Investigation (GEDI) satellite and the Ice, Cloud and land Elevation Satellite (ICESat-2), to scan trees on the ground with a laser pulse that sends back data on the structure of the forest, he said.

Additional data are collected with ground-based lidar scanners attached to all-terrain vehicles and a backpack apparatus to make high-resolution 3D maps of the forest.

The lidar and imagery data from satellites and ground-based sensors are all combined into a web-based mapping platform that shows a comprehensive picture of impacts to forest ecosystems from Hurricane Ian. The map is available online for anyone to use.

The data coming back from these sources includes the weight of trees before and after hurricanes, as well as 3D images of trees that can spot small changes like individual broken tree limbs, he said.

"There was no way to combine data from different sources – until now," Silva said of his lab's innovations.

Silva's research is funded by a USDA National Institute of Food and Agriculture (NIFA) through the Rapid Response to Extreme Weather Events Across Food and Agricultural Systems program.

blogs.ifas.ufl.edu

Malaysia: Protect whatever forests are left and create new ones

In the wake of rising heatwaves in the north of the peninsula and parts of Sabah, combined with revelations of potential large-scale deforestation, the urgency of preserving our forests cannot be understated.

Forests are not mere ornaments to our environment but are crucial for ecological balance, human health and mitigating the adverse effects of climate change.

This narrative becomes even more compelling in light of Malaysia's ambitious 100 Million Tree-Planting Campaign, which, as highlighted by Natural Resources and Environmental Sustainability Minister Nik Nazmi Nik Ahmad, has already seen 58.52 million trees planted.

However, the effectiveness of these efforts is overshadowed by talk of planned projects that promise to deforest areas 100 times larger than Kuala Lumpur.

The spectre of such loss brings into question the fate of newly planted trees and underscores a broader environmental crisis.

The hot season, with temperatures reaching up to 37°C, serves as a potent reminder of the invaluable cooling services that trees provide.

Amid hotter and drier conditions, the role of trees in offering shade, moisture and contributing to carbon sequestration becomes even more vital.

Cutting down trees indiscriminately undermines conservation efforts like the 100 Million Tree-Planting Campaign, and significantly diminishes their positive environmental impacts.

To turn the tide against deforestation and bolster the success of tree-planting initiatives, a multifaceted approach is needed. Here are some strategies to consider:

IMMEDIATE moratorium on all non-critical deforestation to reassess and refine current land-use and conservation strategies.

Strengthen environmental laws to ensure all land-use changes undergo rigorous environmental impact assessments (EIA), emphasising sustainable development and conservation.

INVOLVE local communities and indigenous peoples in forest management and recognise their knowledge and stake in conservation.

PROMOTE sustainable land management and incentivise sustainable agricultural practices such as agroforestry, which harmonises crop cultivation with tree conservation.

INTENSIFY efforts to replant deforested areas using native species, and monitor and nurture the saplings to maturity.

ENHANCE forest protection and implement stringent penalties for illegal logging and land encroachment.

ENCOURAGE timber companies to practise sustainable logging and ensure products are certified as sustainably sourced.

LEVERAGE financial instruments like green bonds and engage in carbon credit trading to fund conservation projects.

LAUNCH educational initiatives to raise public awareness about the role of forests in sustaining life on Earth.

ENGAGE in global partnerships to share knowledge, resources and best practices in forest conservation.

As we contemplate the future of our planet and the legacy we wish to leave for future generations, the time to act is now. Protecting our existing forests while planting new ones must go hand in hand with sustainable management and conservation policies.

By adopting these strategies, we can ensure that initiatives like the 100 Million Tree-Planting Campaign are not just symbolic gestures but part of a broader, effective movement towards a more sustainable and ecologically balanced world.

It is only through sincere, concerted efforts across all sectors of society that we can hope to achieve a sustainable, livable future for all.

dailyexpress.co.my

Global: Forestry governance too fixated on carbon sequestration, study warns

The growing "climatization" of forests has meant too much focus has been put on their role as carbon sinks, and not enough emphasis has been placed on their value as complex ecosystems or social welfare benefits, according to a new study.

The study by the Science-Policy Programme (SciPol) of the International Union of Forest Research Organizations (IUFRO) urgently calls on policymakers to radically shift their approach to forest governance away from the fixation on forest carbon sequestration.

Instead, it argues forest governance policies must incorporate the social values of forests and deprioritise market-based solutions.

The study also claims the success of international forest governance to slow down deforestation remains limited and hard to measure.

Although there has been some progress in reducing the global rates of tropical deforestation, it warns there is still a rising sense of crisis over climate change, biodiversity loss and increasing social and economic inequalities.

And it argues the growing urgency of the climate change crisis has led to the commodification of forests for their carbon sequestration potential.

According to the report, this has led to the rise of new markets for carbon and biodiversity that often focus on short-term economic gains over long-term sustainability and justice.

It also warns the current international forestry governance (IFG) system has led to an "Olympics" of different pledges and targets.

The report states continued references to deforestation rates as the main indicator for IFG effectiveness shows a "limited awareness of the diversity of needs and demands" connected to forests around the world.

The report's main lead author, Professor Daniela Kleinschmit of Freiburg University, said in an interview while there is nothing wrong with looking at forests in terms of carbon storage, there are many other factors which also need to be taken into consideration.

Professor Kleinschmit said there needs to be greater emphasis on forests as eco-systems, biodiversity and how they impact the people who live near or depend on them.

"We should be looking into who are benefitting from issues around forest governance, and who might be losing from them, as well," the professor told me.

"The needs and the priorities of people in different regions will differ, including what they want from a forest and what they need for it to happen," she added. "There is no one-size-fits-all approach."

The professor also rejected the "win-win" marketing narrative that consumers are negating any environmental impact of a tree being planted if they buy a particular product.

"In some countries there are also spiritual and cultural impacts if you take away trees or plant another tree there," she added. "We have to consider these spiritual and cultural needs."

Another of the report's lead authors, Professor Constance McDermott from the University of Oxford, said in a statement "market-based approaches" to forest governance such as carbon trading and zero deforestation supply chains are becoming an increasingly popular.

But she added they also risk "perpetuating inequalities and producing perverse effects" on sustainable forest management.

"Non-market-based mechanisms such as state regulation and community-led initiatives offer important alternative pathways for just forest governance," added Professor McDermott.

forbes.com

Global: Greater biodiversity shields forests from climate extremes, say scientists

Having a large variety of plant and tree species as well as fertile soils rich in organic life helps forests to better withstand the impacts of climate change, particularly droughts, new research has found.

Published in the journals *Global Change Biology* and *PNAS*, two studies carried out by French, German and Chinese scientists underpin the critical importance of fostering biodiversity. When a forest's canopy is made up of many different species, it acts as a buffer that preserves the forest's microclimate – and therefore its ecosystem – because there are fewer temperature and humidity extremes. "This means that when there are very high temperatures, it will be a little cooler in forests with great biodiversity," CNRS researcher Stéphan Hättenschwiler, who participated in the studies, told RFI.

By conducting field experiments in five types of forests across China, the researchers also found that high biodiversity helps tree leaves to decompose, even during periods of drought.

Leaf litter breakdown, essential for the proper functioning of forests, is also helped along by the presence of organisms in the soil such as earthworms, centipedes and mites. "When you have a more species-rich leaf litter and a more complex network of decomposer organisms, this diversity can counteract the negative effects of drought," Hättenschwiler said. "So it's a kind of insurance against extreme conditions."

To achieve their results, the scientists created drought conditions in the forests – which ranged from temperate to tropical ecosystems – using so-called rainfall exclusion systems. They say their findings demonstrate the urgent need to move away from monocultures and to promote the diversity of trees in the world's forests.

The team is pushing for the findings of the studies to be integrated into ecosystem management practices for both forests and grasslands.

rfi.fr

Japan's pollen countermeasures face challenges amid slow cedar logging

A persistent labor shortage and tepid demand for timber are complicating Japan's efforts to mitigate pollen allergies by reducing the number of cedar trees, raising concerns about the feasibility of its ambitious forestry goals.

These challenges have come into sharp focus as the government aims to reduce pollen production by cutting cedar forest plantations by about 20% over the next decade, with the ultimate goal of halving pollen output in about 30 years.

In May last year, the government adopted new strategies to combat pollen allergies. It decided to increase the annual rate of logging of cedar forest plantations from the current 50,000 hectares to 70,000 hectares, and set a target to reduce the area of such forests by about 20% by the end of fiscal year 2033.

Starting this fiscal year, prefectural governments are to engage in comprehensive discussions with owners of cedar forest plantations to initiate tree-felling in designated priority areas. But despite these initiatives, the forestry sector continues to struggle with a declining and aging workforce.

The Forestry Agency is promoting the adoption of high-performance machinery to alleviate the labor crunch, although industry experts warn that the steep terrain of some regions requires personnel to undergo specialized training to effectively operate such machinery.

A local government official highlighted the complexity of coordination among numerous small forest owners, saying, "We would like to consolidate forests for integrated logging, but it will be difficult to get their consent."

The People's Forest Congress, a consortium of industry experts, voiced concerns in February about the potential impact of increased cedar harvesting on the market.

They warned that without an accompanying resurgence in lumber demand, a large influx of cedar in the market could further depress prices. "The goal of a 20% reduction cannot be achieved unless the forestry industry as a whole turns around," a senior official from an industry group lamented.

In response to these market dynamics, the Forestry Agency is exploring ways to boost demand for cedar, particularly in the construction sector. An agency official expressed hope that heightened awareness of pollen allergies might also spotlight the broader challenges facing the nation's forests and forestry industry, and promote greater use of domestic lumber.

japantimes.co.jp