

Letter from the Executive Director



Last year was, on paper, a good one for forests.

Declarations and pledges flowed thick and fast at COP26 in Glasgow. Forests and their central role in the fight for the protection of our climate, for the planet's biodiversity and their relation to the livelihoods of millions of people, came into sharper focus than ever before, and this time, more than US\$ 19 billion was pledged to realise the ambition.

But we've been here before: New York, Bonn, Paris, Glasgow... conference, pledges, hoped-for action. Then, usually, another conference to work out the details.

But we are now out of time. The climate is changing faster than we can pledge to fix it.

The stark reality of today is that the earth is still losing billions of trees¹ every year. Land grabs and deforestation actually increased. And even if every single pledge at Glasgow is kept, we are still on track for a nearly 2°C increase in global temperature².

Protecting and restoring forests is not the single solution to the challenges facing the planet. But forests and the land surrounding them are astonishingly good at providing benefits for the people in and around them, at providing a habitat for millions of species and at stabilising the climate of the planet we call home.

What astounds me is how we humans, as a species, are determinedly destroying something that is actively helping us. And we *know* we're doing it. Otherwise we wouldn't be promising, repeatedly, to stop it.

But the latest IPCC report has set out in stark detail the fact that the emergency is upon us and how dependent we are on nature for our very survival.

We have to go faster, and to do more, decarbonising our economies and recommitting to the natural world. Keep pledging, of course. But start doing, Now.

We must act, at scale, where the crisis for forests is most acute: the lush, dense, mighty forests in the tropics and in the great boreal expanses of the north, which store huge amounts of carbon and anchor some of the world's most valuable ecosystems.

We must attract, incentivise and invest private capital to transform, accelerate and scale-up our efforts, convincing business that nature is a value - not a cost.

Finally, we must create much more radical partnerships for change, fighting not just for climate action, but for climate justice. Raising billions of dollars to achieve Net Zero should no longer be separate from mobilising funds for protecting nature and for delivering equality of opportunity to every human on the planet.

This impact report not only reports on what we've delivered in the last year but also what we dream of being able to deliver. Our partnership, every day, does everything it can for forests, for the people who own, work in, and depend on them, and for the natural world forests represent. Our partnership is also one of the cornerstones of the global mobilisation effort to save and to restore the great forests of the world.

It's time to change the world, together: to win this fight for our planet through building great alliances that don't just garner more pledges but that turn pledges to action; action that saves and restores the world's great forests, and with them, the Earth.

Join us.

John Lotspeich

Executive Director, Trillion Trees

Impact Report 2021

Global Forest Watch

² Climate Action Tracker | Warming Projections Global Update - November 2021

Our mandate in 2022: Turning Pledges to Action

The world has woken up to the positive power of forests. Governments, companies and individuals have pledged to do more to protect and restore our rapidly declining forest cover than ever before. But these pledges are just the first step. Alone, they achieve nothing, and we must hold those pledging to account to ensure that we address the threat facing our forests. It's imperative that we do this. Why?

- Forests serve as a front line of defence against climate change as humanity battles to reduce its emissions and prepares to adapt to a 1.5 degree future. Forests don't just stabilise local weather patterns, bringing much needed water to communities living in and around them—they regulate the global climate.
- 2. Forests provide benefits such as water, food, medicine and livelihoods to hundreds of millions of people around the world. Often these are the people who are most vulnerable to the effects of climate change and who are the protectors of our forests. We urgently need to support them, to address the drivers behind deforestation and degradation and to build resilience.

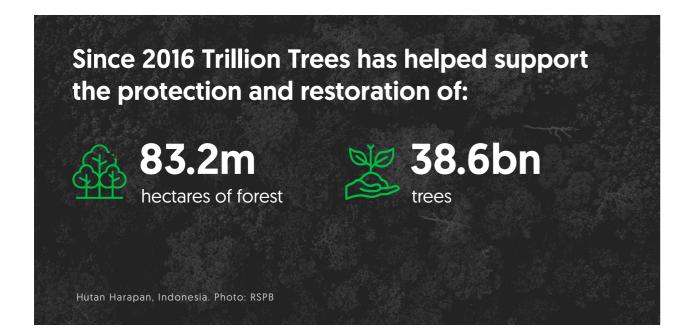
 Forests harbour over half of the world's terrestrial biodiversity, safeguarding ecosystems and our food security.

Today, however, deforestation and land degradation costs the world around \$6.3 trillion every year¹. We shouldn't need to put a dollar amount on nature, but when we do it's staggering how much we all depend on it and the value that forests bring.

Trillion Trees is committed to delivering its part of the mandate to end forest degradation and loss by 2030, and to leading the way in science-led protection and restoration of forests on a monumental scale.

Protecting and restoring forests is mission critical to responding to the triple threat of the climate crisis, mass extinctions and global economic insecurity.

¹ Sutton et al. [2016]. The ecological economics of land degradation: Impacts on ecosystem service values. doi.org/10.1016/j.ecolecon.2016.06.016



Trillion Trees: Global reach, local impact

Since its foundation in 2016, Trillion Trees has supported the protection and restoration of 83.2 million hectares of forest and 38.6 billion trees.

Through on the ground action, partnerships and policy engagement, Trillion Trees conservation efforts can reach an estimated 1.3bn hectares across 60 countries. And currently, these areas store an estimated 319Gt of CO₂.

These same regions provide vital resources and benefits for the 371 million people who live in and around them and are home to 3,272 important species that serve as indicators of Key Biodiversity Areas - species that rely on these remarkable ecosystems for their survival.

And there is hope. Given the urgency of the situation facing us, in the regions where we work, there is the

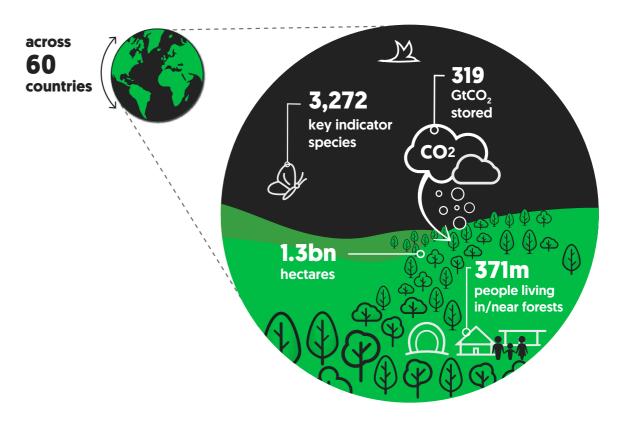
potential to restore and recover 873 million hectares of degraded forest landscapes, working with local communities, governments and partners.

This is a huge opportunity, and one way Trillion Trees can make a tangible impact, moving away from a trajectory of an unliveable future and towards a world where people and nature thrive together.

With the support of our donors and partners, Trillion Trees is leading the way to show how good quality conservation and restoration, with long-term monitoring and assessment, can be done.

But so much more is needed. Time is running out. The climate emergency is upon us. Only if we succeed in turning pledges into action, do we have a chance of winning the fight for our world.

Trillion Trees potential reach



All estimates calculated as follows, using best available data for our landscapes in 2021. Hectares: based on regions, jurisdictions and forest landscapes in which Trillion Trees partners deliver conservation projects; Carbon: Spawn et al. 2020; People: WorldPop; Species: Key Biodiversity Area trigger species. Data will be updated on a regular basis as new information is acquired.

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Landscape restoration potential, at scale

A new Trillion Trees global analysis for 2022

The United Nation's UN Decade of Restoration acknowledges that for the planet to have any chance of meeting its climate ambitions we must not only protect the precious forests we have, but also rapidly accelerate the restoration of what has been lost.

However, to date this has proved a challenge as most restoration efforts are small scale and it's often unclear how and where expansion could happen.

To move towards significant quality restoration at the speed that is needed to solve the climate crisis, every actor needs to work to ensure that forest restoration programmes are **targeted toward places with the best chance of long-term success.**

With this urgency in mind, Trillion Trees partner WCS has developed an approach to identify and prioritise areas of restoration potential within the Trillion Trees partner landscapes; allowing our teams to select the areas where Trillion Trees partners can best deliver quality restoration at scale.

It is exciting to consider just how much potential this approach suggests there is.

Our analysis indicates there are over **873 million hectares where forest recovery or reforestation could occur** – just in the regions where we are working.

Framed in terms of maximising a combination of biodiversity, socio-economic or climate benefits, the approach prioritises areas based on four key indicators: proximity to existing intact forests; inclusion within protected areas; whether the area is currently used as agricultural land, and the potential carbon sequestration rate of restored forest.

These indicators then help determine feasibility and the likelihood of delivering positive benefits for biodiversity and the climate.

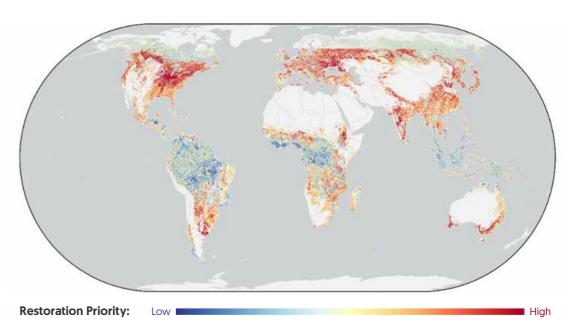
Rather than only looking at places where forest has been totally lost, our analysis looks carefully at both deforested areas and areas where forest remains but has been degraded. Science shows that these degraded areas, if given the chance to recover, can deliver good outcomes for climate mitigation and biodiversity conservation. We have used the <u>Forest Landscape Integrity Index</u>, which shows how intact a forest is, as a key part of the process.

The process generates outputs in two categories:

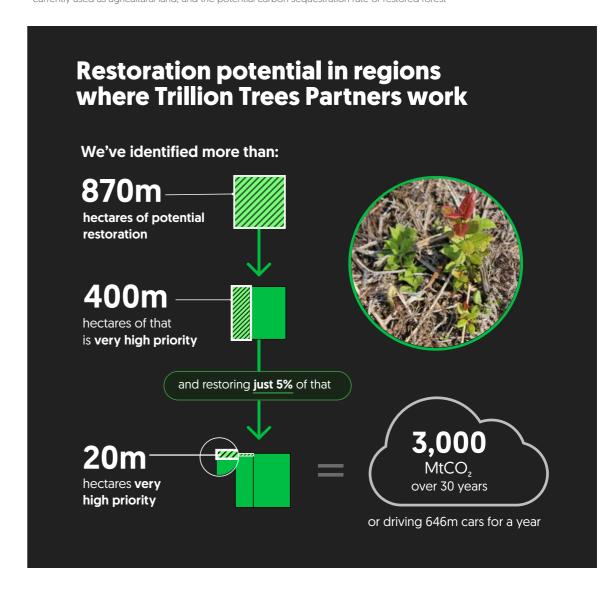
- degraded areas with potential for recovery
- deforested areas with potential for **reforestation**

From the identified 873 million hectares where forest recovery or reforestation could occur, 438 million hectares of that are very high priority areas for restoration. And our restoration science teams are now working to activate the areas within this potential where Trillion Trees partners can deliver quality restoration. This includes working with local stakeholders and communities to assess if restoration is feasible and appropriate, and determine what would work best for the local context.

Importantly, even if we can move just 5% of the very high priority areas into restoration, the results could sequester and store over **3,000 megatonnes** of CO₂ over 30 years - equivalent to driving 646 million cars in a year¹- and this is just in the regions where Trillion Trees partners work. The potential for quality restoration at scale can lead to significant climate action.



Map showing restoration potential of degraded forest areas, prioritised based on four key indicators: proximity to existing intact forests; inclusion within protected areas; whether the area is currently used as agricultural land, and the potential carbon sequestration rate of restored forest



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^{1 &#}x27;US EPA Greenhouse Gas Equivalencies Calculator'

Our five-year commitments

The Trillion Trees partners work in forest landscapes in over 60 countries globally. The joint venture focuses on areas where forests are most threatened and where remaining intact forests require protection.

This is where there are the greatest risks resulting from deforestation and degradation, but also the greatest gains to be made for people, nature and climate.

Trillion Trees has committed to ambitious targets over the next five years, working towards achieving a stable climate where people and nature thrive together.

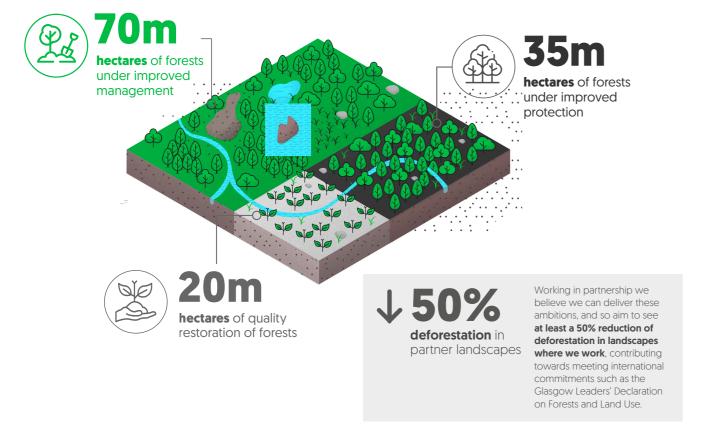
Over the next five years, Trillion Trees aims to deliver, in our forest landscapes:

- 70m hectares into improved management
- 35m hectares into improved protection
- 20m hectares into quality restoration

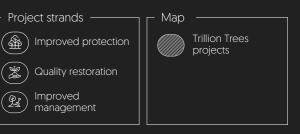
Meeting these aims will require the support of and strong partnerships with governments, financial institutions, companies, civil society partners and most importantly, the communities living in and around forest landscapes. We know that considering the needs of people first and including their participation is key to successful conservation and to addressing the drivers behind deforestation.

Our aims over the next five years

IMPROVED LAND USAGE



Progress against our targets





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Restoring forest connectivity

in the Colombian Andes

In the Colombian Andes, less than a third of original ecosystems remain, but these forested slopes provide much of the water used by 70% of Colombia's population. Deforestation has led to soil erosion that generates major challenges for users further downstream, including agriculture and industry.

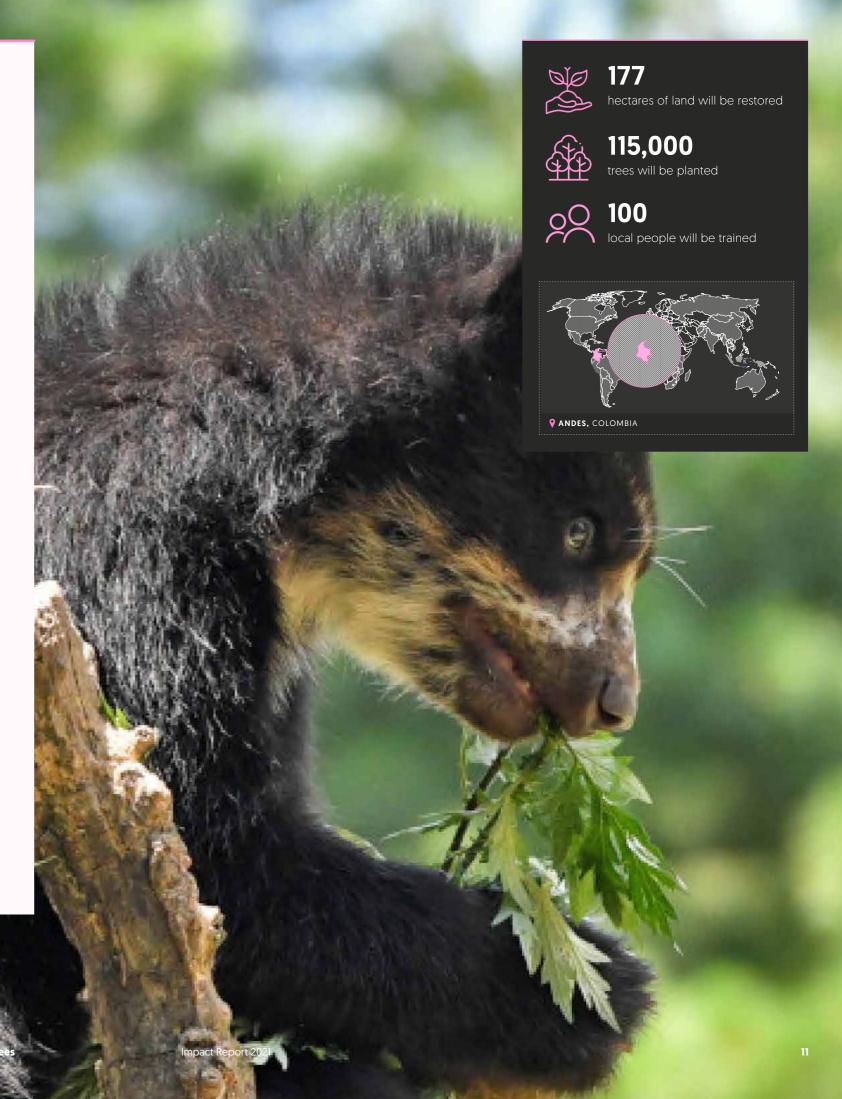
The remaining forest is highly biodiverse and harbours important populations of the Andean bear, which depends on large areas of habitat for its home. Continued degradation or change of use of these natural ecosystems could put at risk the region's outstanding biodiversity and the ecosystem services on which local people depend. Conserving and restoring them is vital.

In the highlands of the Andes of Colombia, Trillion Trees partner WCS runs three programmes designed to improve the connection between what remains of the forest and to protect water courses. These programmes [We Conserve Life, Cali Living basin, and Saldaña River, a basin of life], are implemented through partnerships with public, private and local stakeholders. All three programmes aim to conserve the biodiversity and ecosystem services connected with water sources, providing benefits to local communities. The initiatives find solutions that are beneficial to farmers, to avoid further

deforestation and protect and restore wildlife corridors. This involves fencing sensitive watershed areas to facilitate natural forest regeneration and growing native tree species for replanting where it's most needed.

After five years of these partnerships 103 conservation agreements have been signed with rural families, improving farm management, recovering around 200 hectares of degraded habitat through active restoration with native plant species and protecting an additional 5,000 hectares of natural private areas, which were set aside by the owners and protected with fences. These corridors are used by ecologically important species, including the Andean bear, the mountain tapir and the jaguarundi. This shows that it is possible to restore healthy wildlife habitat in degraded areas, even where the main driver of deforestation (livestock farming) is still present.

In 2021, WCS secured support from the Ministry for Environment and Sustainable Development with matched funds from Trillion Trees, to expand restoration work in the area. In total, 115,000 trees will be planted across a further 177 hectares of degraded land, working with, training and employing around 100 people from local community groups. However, there is much more to be done! Across the two landscapes there is the potential to restore at least 3,500 hectares.









From pollination to product, women's businesses in Burkina Faso are thriving

Trillion Trees partner, BirdLife's, Birds, Bees & Business combines nature restoration with a sustainable income for local communities in Burkina Faso.

This includes a huge range of techniques and training, from composting, to beekeeping, to raising seedlings in nurseries. Ensuring sustainable farming techniques, growing sustainable timber for firewood and planting and regenerating diverse tree species makes way for attracting critical migratory birds and insects that keep the landscape thriving, while also producing high-demand products.

Known locally as 'women's gold', shea butter is only harvested, processed and sold by women. A vegetable fat made from shea nuts, the fruit of the shea tree, it has been used since Ancient Egyptian times for many things from food products to a core element of cosmetic products. Nowadays there is a global market for shea butter and it is promoted as a sustainable alternative to palm oil. Although shea trees are a part of a "natural" savannah landscape, there are considerable effects on biodiversity related to the shea harvest. Birds, Bees & Business works with development organization Cordaid, Vogelbescherming Nederland (BirdLife in the Netherlands) and NATURAMA (BirdLife

in Burkina Faso) on nature restoration and better incomes for women who depend on shea in Burkina Faso. The project aims to increase yields of the shea tree by pollination. Pollinating insects depend on a biodiverse landscape, as do migratory land birds. By restoring biodiversity both the people who depend on the shea yield and the birds benefit: a win-win model.

Shea trees grow best in a varied landscape rich in insects, and such an environment also benefits birds. But this rich landscape is changing: many trees are being cut down for firewood and the number of insects is decreasing due to intensive land use, resulting in fewer shea nuts to harvest. An impoverished landscape therefore has direct consequences for the income of local people.

One way the project is helping ensure longevity of shea butter production, is through beekeeping. The project granted 150 beehives to five women's cooperatives for honey production in shea parks, and trained them in modern apiculture, entrepreneurship, and fundraising. These parks also produce a variety of other fruits that need pollination. Convinced that apiculture can make a difference in the lives of its members, one cooperative began mobilising funds and successfully acquired 120 new hives for 40 women with protection equipment and harvesting kits.

With the new beehives and the creation of a storage place for stocking honey, this cooperative will make a minimum turnover of 11,000 euros per year.

Alongside beekeeping, restoration of the landscape around shea parks and the resources it can provide is also critical. Burkina Faso has committed to reforesting the landscape, but there are challenges from desertification and access to quality seedlings. Birds, Bees & Business has risen to the challenge and in 2021 was able to produce 150,000 seedlings. It aims to plant at least 440,000 new seedlings by the end of 2022 and 600,000 trees will be protected for natural regeneration. The aim is to have a total of 1 million trees recovered and planted during the project cycle.

Finally, compost plays a key role in improving crop yields, conserving microorganisms and insects, ensuring the survival of migratory birds as well as optimal pollination of crops and production of non-wood forest products. NATURAMA is promoting the use of compost among small-scale farmers, and 2,659 small-scale subsistence farmers were trained in the first year, including 1,129 women. With the application kits they received, 1,600 farmers managed to produce compost for the current season.



Quality restoration

Restoring a degraded Kenyan landscape for people, nature and elite athletes

WWF Kenya, with Trillion Trees; UK PACT [Partnering for Accelerated Climate Transitions) programme (funded by the UK Government's Department for Business, Energy and Industrial Strategy (BEIS) through the UK's International Climate Finance); the Eliud Kipchoge Foundation and national and county governments and community-based organisations is implementing 'Greening Kaptagat: Establishing agroforestry and clean energy solutions within a forest-based landscape in Kenya'. The one-year project is laying the foundations for work over the coming years that will reduce emissions, contribute to poverty alleviation and address land degradation.

The 32,941 hectare Kaptagat landscape is part of the Elgeyo Hills-Cherangany Ecosystem and is an important carbon sink, water tower and livelihood source for local communities. The landscape is home to eight different communities that rely on the region for water, wood-based goods and agriculture, while also supporting the area's rich biodiversity. It's also home to a world-renowned, high-altitude training camp for elite athletes.

But this special place is under threat.
Unsustainable use of forest products,
overgrazing and charcoal production,
lack of regulation and lack of alternative
means of livelihood, mean forest cover and

grassland areas are declining at an alarming rate, affecting the landscape's ability to provide ecosystem goods and services. The steep terrain and soil characteristics of the area exacerbate these pressures as the largely treeless farmland is highly vulnerable to degradation. WWF has been working with Eliud Kipchoge – Olympic marathon champion, world record holder, and one of Kenya's most celebrated runners who trains in Kaptagat – to raise the profile of the issues facing the region.

Through support from Trillion Trees and partners, WWF has produced a restoration plan with Community Forest Associations, Water Resource Users Associations and government agencies. This plan provides a road map towards coordinated restoration of forests and farmlands to enhance livelihoods of local communities and improve biodiversity conservation and ecosystem goods and services. Restoration implementation was delayed due to lack of rain between October and November 2021, but native seedlings from local nurseries will now be planted in April-May 2022. This is the beginning of providing 32% of Kenya's emissions reductions contributions with the restoration of at least 1,000 hectares of deforested and degraded land.

The project has been able to construct and install a solar-powered water pump, which supplies 172 households with clean water,

saving time they otherwise spend fetching water from the river. Through this project, the water catchment area along the spring will be protected through planting of native trees, securing a continuous supply of water for the community.

The project has also trained 120 farmers on the installation and management of domestic biogas units, production of high quality seedlings and grasses, and climatesmart agriculture. For example, many farmers within the landscape keep livestock for milk production, with some of this livestock grazing in the forest. With biogas units, grazing pressure is reduced and dung provides fuel for biogas production. Through this, degradation levels in the forest by way of overgrazing are reduced. Beneficiaries of the biogas units have been identified and construction of 20 units is expected to be completed by April 2022.







Establishing forest-friendly farming in Peru's Amazon

Covering nearly 8 million hectares

– about 15% of Peru's Amazon – the
forests of Madre de Dios in southeastern Peru are vital, yet vulnerable.

They are home to at least seven distinct indigenous cultures. The area's triple-border location with Brazil and Bolivia means it is part of a huge landscape of 20 million hectares that covers one of the Amazon's main headwaters. But the forest, its people, and its diverse wildlife are threatened by expanding agriculture and infrastructure, as well as by illegal mining, logging, and other activities. Extensive cattle farming is the main cause of deforestation. About 45% of Peru's greenhouse gas emissions come from land use, land use change, and forestry. Between 2001 and 2018, annual deforestation increased by 400%.

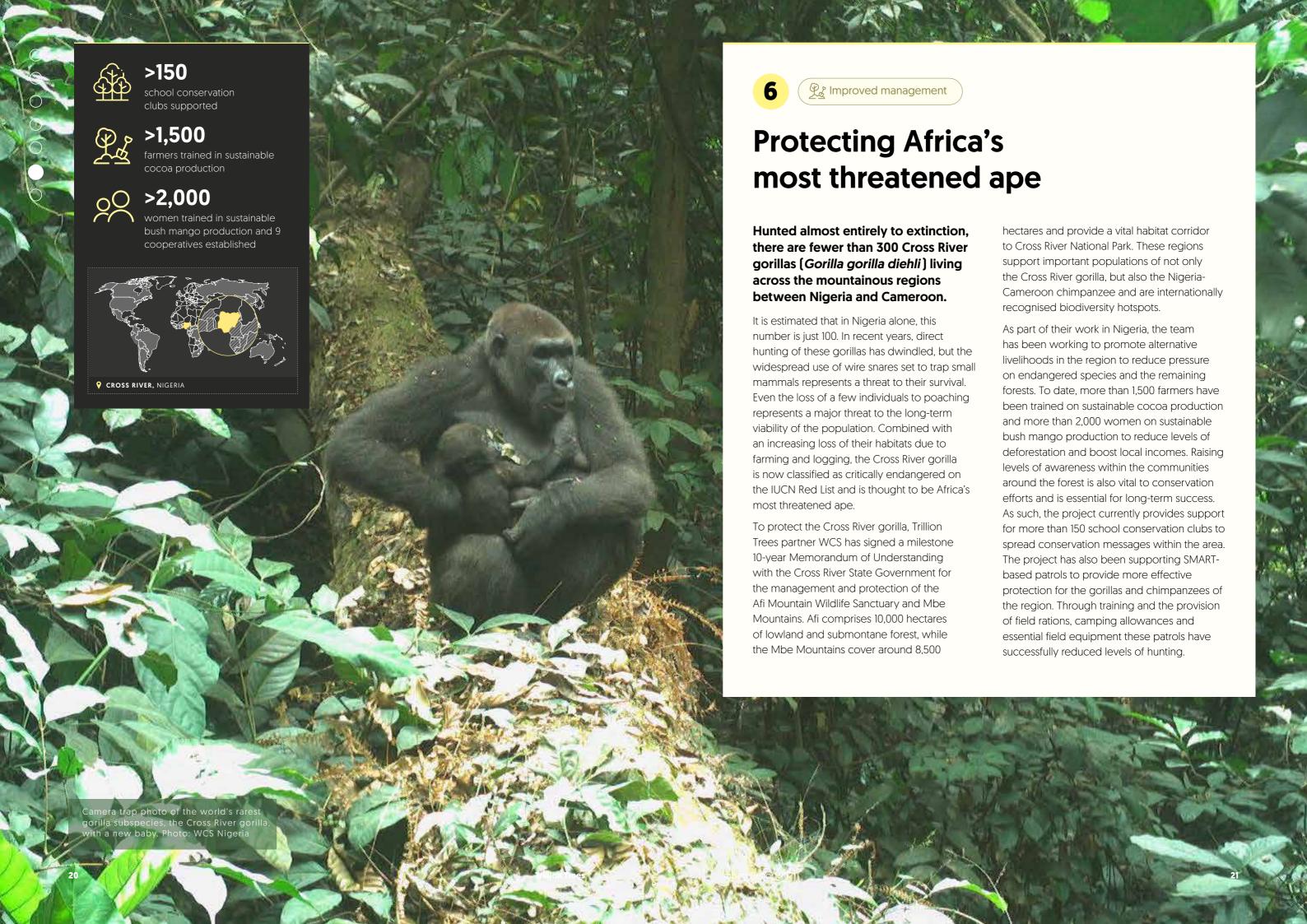
Cattle farmers often have poor access to technology and finance, meaning their yields are typically low, and often decline as soil fertility declines. A new, more environmentally friendly, nature-based way of farming, called silvopasture helps increase animal production, stores more carbon, and aids conservation of soil, water and biodiversity, helping to improve farmers' livelihoods and therefore reducing the need for further deforestation. The region has been prioritised by the Peruvian Government and the Ministry of Agriculture for establishing deforestation free agriculture and forestry.

Working with the local government, Trillion Trees partner WWF has set up 10 farm field schools to train 170 local farmers, including the poorest, small-scale cattle farmers, with parts of the training designed specifically for women and young people. The schools not only aim to increase productivity, but also to improve the farmers' understanding of the value of the soil; the contribution trees can make to agriculture - in particular to the health of the soil – and how what they do on their own property can affect the entire community. The farmers are sharing their own experiences and knowledge, while building their understanding of the functioning and importance of the water cycle; how to use bio-fertilisers and natural pesticides; and the benefits of forest conservation for themselves, their community and the broader environment.

The team and its partners are involved in the planning and implementation process so that farmers have the knowledge and the means to physically convert their land to silvopasture and forest protection areas can be established. Farmers are also gaining a better understanding of how to attract funding and improve returns. The work supports the government of Madre de Dios's 2030 plan to lower emissions by 889,827 tonnes CO₂ equivalent, by reducing conversion of forest to cattle pasture and the establishment of silvopasture practices.

4,000 improved management farm field schools established 170

Silvopasture can increase production and reduce deforestation. Photo: WWF Peru





Keeping the water and local business flowing through improved forest management

The 94,000 ha Mbeliling landscape, in Flores, Indonesia, is an important area for global biodiversity conservation and socio-economic development.

It's been listed as the highest priority status for biodiversity conservation in the tropics, with very high numbers of endemic plants and birds found within the landscape, such as the Flores Hawk-eagle [Nisaetus floris] and Flores Scops-owl [Otus alfredi] – not to mention a population of Komodo dragons. For people, the forests of Mbeliling, provide an important water catchment, supplying water for over 31,000 people in Labuan Bajo and about 41,000 people in surrounding rural areas, both for agriculture and household needs.

In this landscape, Trillion Trees partner BirdLife International, works with Burung Indonesia. The approach involves both policy and sustainable finance, focusing on facilitating additional investment into green economic activities. This includes developing a policy framework that integrates key environmental safeguards and priorities into local planning, building a mechanism for 'Payment for Ecosystem Services' (PES), and raising capital investment for community-led businesses. Through this project, agreements with individual community businesses have helped an additional

5,385 hectares of forest to be set aside for conservation rather than production purposes, such as timber or oil palm. In total, 177 people have benefitted through the various activities of the project.

In the pilot phase of the Trillion Trees/BirdLife International Accelerator – an initiative to tackle unsustainable conservation finance by tapping into the finance sector and innovating sustainable finance mechanisms - Burung Indonesia piloted a PES model in partnership with Amandava Mineral Water, where part of the profit goes to conservation of the water catchment area in the Mbeliling landscape. During the last year, the project team scaled up the initiative with additional partners from other mineral water entrepreneurs in Labuan Bajo. To manage these partnerships, a new Trust Fund was developed with the Labuan Bajo Care for Water Entrepreneurs Association (Asosiasi Pengusaha Peduli Air Labuan Bajo), which will combine the contributions of 28 member companies to help protect the forest. Through the Trust Fund, all contributions from the member companies will be collected, and this will be distributed to community groups further up the river to carry out conservation activities to keep the watershed in good condition.



Burung Indonesia initiated the establishment of the Labuan Bajo Water Care Entrepreneurs Association. Photo: Burung Indonesia

Forests will regrow if we let them

A Trillion Trees research study showed that nearly 59 million hectares of forests – an area larger than mainland France - have regrown in the last 20 years.

This area of forest has the potential to store the equivalent of 5.9 Gt of CO₂e – more than the annual emissions of the United States.

The study was designed to help inform forest restoration plans worldwide, giving a picture of the areas where focusing restoration efforts could be most beneficial. It was part of a two-year research project, which involved examining more than 30 years' worth of satellite imaging data and surveying experts with on-the-ground knowledge of more than 100 sites in 29 different countries. Learn more at www.trilliontrees.org/2021/05/13/forests-will-regrow-if-we-let-them.



Trillion Trees Guide to Investing in Forest Restoration

In 2021 we launched our online tool to help guide investment in forest restoration.

Designed to help people navigate the rapid growth in the number and variety of tree planting projects around the world, the Trillion Trees Guide to Investing in Forest Restoration takes users through a series of nine diagnostic questions to consider when assessing any forest restoration initiative.

The interactive tool helps those looking to support forest restoration by asking a series of questions to better understand the potential of any given restoration programme. Questions are specifically about how a programme might deliver progress against the triple challenge the world faces: the urgent need to address the climate crisis, the loss of global biodiversity, and the increasing inequality of opportunities for people around the world. Access the tool at www.trilliontrees.org/trilliontrees-guide-to-investing-in-forest-restoration.

In its five years of existence, the Trillion Trees partnership has made an impact by protecting intact forests, addressing drivers of deforestation and restoring natural forests for the long term, with experience from our partners and communities to lead the way.

Forests are not the only solution, but the climate won't recover without them.

We need the political will and the finance to back it up.

With your support, we can continue to protect and restore the world's forests, based on science and proven impact.

Be a part of the journey towards a stable climate, robust biodiversity and economic opportunities for everyone.

Join us and invest in the world's forests.

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Trillion Trees is a joint venture of BirdLife International, Wildlife Conservation Society and WWF to urgently speed up and scale up global efforts to protect and restore forests.

trilliontrees.org