

# Deforestation Position Paper

## Preventing Agriculture Driven Deforestation and Conversion of Natural Ecosystems

The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect nature and improve the lives of farmers and forest communities.



# Introduction

Thriving forests, along with other natural climate solutions such as agroforestry, could help us achieve 37 percent of the emissions reductions needed to limit global heating to 1.5 degrees<sup>1</sup>. Forests also regulate microclimates and generate rainfall, helping farmers to cope better with climate impacts. All told, 1.6 billion people worldwide depend on forests for their livelihoods<sup>2</sup>. And yet, we keep losing forests at high rates—in 2019 losing a football pitch of tropical forest every six seconds<sup>3</sup>. Commodity production remains one of the most significant drivers of tropical deforestation (responsible for up to 40 percent)<sup>4</sup>, followed by shifting agriculture<sup>5</sup>. It is crucial that companies and governments take responsibility for transforming supply chains in the fight to end ecosystem conversion.

The past decade has seen unprecedented commitments from companies, industry associations, and governments to address agriculture-driven ecosystem conversion. The Consumer Goods Forum started in 2010 with the commitment to end deforestation in the members' supply chains by 2020; in 2014 more companies and governments joined through the New York Declaration on Forests, and now 60 percent of the most influential companies in forest risk commodities have committed to ending deforestation in at least parts of their supply chain<sup>6</sup>. Yet these commitments have had little impact on the ground. The 2019 five-year progress report of the New York Declaration on Forests laments that deforestation has actually increased since the 2014 commitments and calls for more ambitious and collective action before it is too late<sup>7</sup>.

Throughout its 30+ year history, the Rainforest Alliance has worked to halt agriculture-driven deforestation while supporting the wellbeing of producers and forest-dependent communities around the world. Building on this experience, this paper presents the Rainforest Alliance's position on agriculture-driven deforestation and conversion and outlines our strategy for addressing it. The paper details the approaches we use as an organization as well as the principles that we believe must guide the global community's broader efforts to halt agriculture-driven conversion and its negative impacts on climate, biodiversity, and human wellbeing.



Photo: Creagh Cross

## THE RAINFOREST ALLIANCE'S POSITION

The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect nature and improve the lives of farmers and forest communities. Preventing agriculture-driven deforestation and conversion of natural ecosystems is at the heart of our mission and so the Rainforest Alliance advocates for no-deforestation and no-conversion commodities.

To achieve this aim, we promote and help companies to implement clear and consensus-based definitions, norms, and implementation mechanisms, such as those specified in the [Accountability Framework](#)<sup>8</sup>. In line with this Framework, we support no-conversion supply chains, defined as commodity production and trade that do not contribute to the *conversion of any natural ecosystems*. Conversion refers to the change of a natural ecosystem to another land use, or the profound change in a natural ecosystem's species composition, structure, or function through, among others, severe or sustained *degradation*.

This definition implies several things:

- First, all ecosystems must be protected, not just forests. Limiting the focus to the conversion of forests (deforestation) risks creating leakage to other natural ecosystems. In Brazil, for example, stronger protections for the Brazilian Amazon contributed to high rates of conversion of the Cerrado ecosystem over the past decade.
- Second, ecosystem conversion driven by commodity production for international supply chains should be stopped, no matter whether legal or illegal. As just one example, while the Indonesian government has committed to protect the remaining forest cover in international agreements such as the Aichi Biodiversity Targets, the Paris Agreement on climate change, and the Sustainable Development Goals, deforestation in non-state forest areas is still allowed and is not defined as deforestation. Focusing on legality only in the Indonesian context will still lead to deforestation.
- And third, as tree and crop plantations generally do not meet the definition of natural ecosystems, conversion from a natural forest to a plantation is considered a form of conversion.

In addition to safeguarding forests and other natural ecosystems, agricultural supply chains must also respect human rights and support sustainable livelihoods and natural resource management. To do this, we advocate that no-conversion policies and programs: 1) include and implement strong human rights commitments (e.g., per the [Accountability Framework](#)); 2) support producers to meet sustainable supply chain requirements and improve the sustainability of their production practices; and 3) collaborate with other stakeholders at a landscape or jurisdictional level to improve land and resource governance and minimize "leakage" of deforestation and conversion to other producers, commodities, and ecosystems.

## THE RAINFOREST ALLIANCE'S STRATEGY

Preventing ecosystem conversion is central to each of our four core interventions: certification program, supply-chain services, landscape management, and advocacy. The Rainforest Alliance's *certification program* is an important vehicle to raise awareness, recognize conversion-free producers, and provide incentives for farmers not to convert natural ecosystems. In 2019 our certification programs covered more than 5 million hectares and reached more than 2 million farmers in over 70 countries. Certification is a widely-used tool for establishing conversion-free supply chains, and its assurance system is a powerful tool for monitoring deforestation and avoiding deforestation-linked products. Halting deforestation is a top objective of [Rainforest Alliance's 2020 Certification Program](#)<sup>9</sup>. As one of the major innovations to strengthen assurance we have developed an automated remote sensing-based deforestation risk assessment which certificate holders and certification bodies will use in group management and audits<sup>10</sup>.

With *supply-chain services* the Rainforest Alliance supports supply chain actors to address sourcing of forest-risk commodities at company-wide level, which often includes certified crops. For commodities and product volumes for which certification is not feasible, the Rainforest Alliance works with companies to devise other effective means to minimize and address deforestation risk in the supply chain, including through supply chain management and landscape-level actions.

To reach scale and inclusivity, the Rainforest Alliance is implementing and supporting more than 100 *landscape management projects* that safeguard and restore forests in priority landscapes. Interventions that focus only on certain supply chains and sectors bear the risk of shifting conversion to other sectors and non-certified producers (i.e. creating deforestation-free certified supply chains, but increasing deforestation in other crops or uncertified supply chains). That's why landscape approaches are important to cover all producers of different crops as well as authorities and suppliers in one geographical area, and to address issues such as tenure, biological corridors etc. that cannot be tackled by supply chain interventions alone. The Rainforest Alliance now supports integrated landscape management programs on more than 2 million hectares in 9 countries in Latin America, Africa and Asia<sup>11</sup>.

Finally, the Rainforest Alliance, working in coalitions and partnerships, *advocates* for effective public and private sector commitments and a mix of public policies that includes legislative and voluntary measures. Ecosystem conversion can be halted only if all stakeholders are supported and held accountable by an effective policy framework. Such a framework should ensure that companies take on their responsibility to address any adverse environmental and human rights impacts of their own sourcing practices; and should ensure that governments take the actions needed to create an enabling environment in both producing and consuming countries.

## PRINCIPLES FOR INTERVENTIONS PREVENTING CONVERSION

The Rainforest Alliance's own interventions are one set of contributions to the broader effort of minimizing agriculture-driven conversion and fostering sustainable development. We identify the following five principles as crucial for guiding all efforts to meet these goals:

1. The protection of all remaining natural ecosystems should have priority
2. Ecosystem restoration needs more investments
3. Ecosystem protection is best achieved through a holistic sustainability approach that addresses livelihoods and advances human rights
4. Local communities must be supported as ecosystem stewards
5. The risks and value of sustainable production should be transparently and responsibly shared throughout the supply chain.

Each of these principles is elaborated further below.

### **1 - The protection of all remaining natural ecosystems should have priority**

Protecting remaining ecosystems is essential for protecting the biodiversity, carbon, and ecosystem service values that are urgently needed to address the climate crisis, among others. While there are legitimate discussions to be

had about how best to balance nature conservation and economic development at a territorial level, in the context of agriculture and forestry there is growing consensus that agricultural production must not contribute to further deforestation or conversion of other natural ecosystems.

It is also more feasible than ever to protect remaining natural ecosystems. To meet commodity demand, growth of agriculture is possible in many areas through intensification, diversification, and restoration of degraded land. There is no need to expand the footprint of agriculture, and advances in remote sensing and cloud computing further enable companies, governments, and civil society to monitor deforestation more effectively.

*As mentioned above, we have prioritized conversion of natural ecosystems, and particularly its assurance, in our 2020 Certification Program through the incorporation of an automated risk assessment based on remote sensing in the certification process. This will enable certificate holders and auditors to better detect deforestation and prevent future cases. We do not allow for a general mechanism to compensate past conversion through restoration; cases of conversion after the 2014 cut-off date render a given area ineligible for certification.*

*In our projects we deliberately work in the buffer zones around important ecosystems to reduce pressures on them. Examples include training farmers in conservation practices around the Bukit Barisan Selatan National Park in Indonesia<sup>12</sup>; and supporting community forest enterprises in the Campo-Ma'an National Park in Cameroon<sup>13</sup>.*



Photo: Craegh Cross

## 2- Ecosystem restoration needs more investments

Besides ensuring existing ecosystems remain intact, this decade needs to see more progress on restoration of ecosystems, both wide-scale restoration of forests and mosaic restoration of agricultural landscapes. The latter can be implemented through expanding riparian buffers (beside rivers and streams) and conservation areas, implementing agroforestry systems and other forms of on-farm tree cover.

The 2020 Sustainable Agriculture Standard<sup>14</sup> requires all farmers to work toward a specified amount of natural vegetation on their farm (10/15%), if they do not already have this level. We also work with producers on the restoration of converted areas as part of our supply-chain services and our landscape management projects.



## 3 - Ecosystem protection is best achieved through a holistic sustainability approach that addresses livelihoods and advances human rights

*Climate-smart, regenerative agriculture leads to more resilient livelihoods*

To safeguard already pressured natural resources and biodiversity, taking an agroecology and integrated system management approach is key. Climate-smart, regenerative agriculture aims to increase biodiversity, enhance ecosystem services, and increase agroecosystem resilience leading to resilient livelihoods. This way of farming is based on enhancing the inherent strengths of agroecosystems, ultimately enabling a reduction of external inputs (synthetic fertilizers and pesticides) and increasing farm net income by reducing costs.

The 2020 Sustainable Agriculture Standard includes several requirements in the management, farming, and environmental chapters that promote a holistic approach to agriculture, including integrated pest management and soil management, among others, and now includes an additional climate risk assessment that guides farmers to assess and address their climate-related risks. In several landscape management projects we have also developed recommendations and training programs on climate-smart agriculture, for example, in Ghana<sup>15</sup>.

*We need to ensure human rights are respected*

Deforestation and conversion are often linked to human rights abuses, including local communities losing their land or access to resources and exploitative labor practices in production and processing operations. Production and sourcing strategies that address conversion but fail to address critical human rights are not acceptable solutions. In addition, environmental protection has also been known to violate human rights. Therefore, companies must commit to and implement protections to fully respect human rights, including the free, prior, and informed consent (FPIC) of local communities and the internationally recognized human rights of indigenous peoples, local communities, and workers.

*The Rainforest Alliance calls upon companies to establish supply chain commitments and implementation systems that fully address both conversion and human rights, in line with the Accountability Framework. We likewise advocate that government policies tackling the deforestation and conversion impacts of commodity trade also fully address human rights abuses in line with these same norms. This includes policies that are inclusive of risky suppliers and origins to address the issues there rather than encourage disengagement of responsible actors in risky areas.*



Photo: Marcus Schaefer

#### **4 – Local communities must be supported as ecosystem stewards**

##### *Importance of bottom-up approaches*

Approaches to improve natural resource management on the ground that do not take into consideration the priorities or constraints of producers and local communities are neither equitable nor likely to work well. Complementing no-conversion commitments with locally adapted solution is also more likely to succeed in the long term. The most effective and respectful approach to drive sustainability involves reinforcing producers’ priorities and capacities with strategically designed external support, resources, and tools. Certification programs should combine the development and assurance of the norm or standard with supporting implementation on the ground in different contexts.

*Aiming to give certificate holders more ownership of both their sustainability efforts and the targets they set, the Rainforest Alliance 2020 standard aims to be more contextualized and risk-based<sup>6</sup>. Similarly, in all landscape management projects, we assess the interests and needs of our partners on the ground. We also work in projects with participatory monitoring, involving communities in monitoring deforestation and implementing no-deforestation commitments, for example in partnership with EcoCare in Ghana<sup>7</sup>.*

##### *Effective landscape governance at scale*

Ecosystem conversion has long been fueled by poor governance, manifested as illegal activity, corruption, unclear or inequitable land tenure, and conflicting authority over forest resources. Integrated landscape management projects facilitate collaborative and effective natural resource management. Such partnerships often struggle to organize investable projects and sustain processes that regenerate ecosystems and economies.

*In many regions in Africa, particularly West Africa, we bring together Landscape Management Boards—multi-stakeholder bodies that facilitate discussions around land management issues and resolve issues (such as forest fires) across communities. They involve different stakeholders and sectors of one landscape or jurisdictional unit.*

*As part of our future priorities, we aim at bringing landscape interventions to scale by providing a digital data management platform and integrated tools, along with seed funding and financial innovation. This would help partnerships plan, fund, implement, and demonstrate the impact of transformative landscape investment portfolios. For this we are currently developing the “1000 Landscapes for 1 Billion People” initiative<sup>8</sup>.*

## *Tenure rights and local communities as the best guardians of natural ecosystems*

With clear rights, forest communities and farmers are better able to manage standing forests and trees in agroforestry systems as economic assets. This enables them to realize multiple benefits, for example from sustainable logging, commercialization of non-timber forest products, increased value-added processing, and markets or funds for conserving ecosystem services. Giving tenure rights to those who manage natural resources has been shown as an effective way to conserve natural resources in many contexts. This includes granting forest management concessions to communities and allocating ownership or use rights over timber trees to farmers who manage the land on which they grow.

*In the Maya Biosphere Reserve in Guatemala, the Rainforest Alliance leads USAID's Climate, Nature and Communities in Guatemala initiative in partnership with the Association of Forest Communities of Petén, supporting community concessions in managing nearly 17 percent of the reserve's 2.1 million hectares of forest<sup>19</sup>. Between 2013 and 2019, the nine concessions' sustainable forestry businesses made US \$58 million and benefitted 44,000 people, and maintained a near-zero rate of deforestation, while neighboring areas suffered high deforestation levels. This example illustrates the viability of community forest management as an effective mechanism for long-term forest protection and sustainable livelihoods.*

*To bring access to the resources to forest communities that enable their enterprises to meet their full economic potential, we have set up the Forest Allies<sup>20</sup>. Through a community of practice, we bring together companies, regional civil society organizations and Forest Communities to form powerful partnerships. The Forest Allies also support and enable Rainforest Alliance's model of Integrated Community Forest Management, which focuses on both protecting natural forests and partnering with communities to build strong local economies, by creating a pool of capital used to invest directly in support of community forest enterprises and by fostering the important contribution of building a foundation of mutual respect, trust and a shared vision between Forest Communities and markets.*

## **5 - The risks and value of sustainable production should be transparently and responsibly shared throughout the supply chain**

### *Accountability through traceability, transparency, and verification (or assurance)*

Traceability (knowledge of the precise origin of products) and transparency (public disclosure) are important to ensure that manufacturers, retailers and brands are accountable for their no-conversion commitments, and to direct investments in the field. A credible assurance system with an independent verification process (preferably third party) is important to validate results and substantiate claims. Comprehensive and standardized reporting is important not only in sustainable supply chains but also in landscape interventions.

*The Rainforest Alliance's certification program includes a traceability system, which we aim to continuously improve. Important recent innovations include the above-mentioned automated risk assessment on recent deforestation based on remote sensing data, which we will make publicly available; and origin matching for mass balance which means that the origin of physical volumes is matched with the origin of certification "credits", and therefore ensures that investments in sustainability flow back to the right countries<sup>21</sup>. For our assurance system we have recently piloted an audit allocation system<sup>22</sup>, which automatically assigns a certification body to a certificate holder to perform audits, minimizing the risk of conflicts of interest in auditing. In the cocoa sector, we require traders to share geolocation data of their supply base, thereby incentivizing more transparency and accountability of where they source from.*

*The Rainforest Alliance is also developing new transparency and verification mechanisms for landscape-level performance through the LandScale initiative, which is jointly led by the Rainforest Alliance, Verra, and Conservation International<sup>23</sup>. LandScale provides a standardized approach to assess the progress of landscape initiatives and facilitates incentives and benefits from demonstrated sustainability performance and improvement. LandScale is now being pilot-tested in 15 landscapes around the world based on the prototype version released in October 2020.*

### *Shared responsibility for more equitable supply chains*

Avoiding ecosystem conversion, compensating past conversion, restoration, and increasing native vegetation on farms may each require investment or opportunity costs by farmers and farming communities. Unfortunately, a large share of these costs falls on the shoulders of farmers alone, many of whom live in poverty. The costs, risks—and value—of sustainable supply chains must be shared more equitably. This requires a change in ways of doing business and the Rainforest Alliance is working towards this, through our certification program requirements for sustainable investments, and enhancing the transparency and accountability of the entire supply chain.

*According to the 2020 Sustainable Agriculture Standard's Supply Chain Requirements<sup>24</sup>, companies are required to pay a Sustainability Differential (cash payment to certified farmers), as well as make Sustainability Investments towards the needs identified by farmers.*

### *The role of governments*

Governments (in both consuming and producing countries) also have to take responsibility. For example, under the European Green Deal, an essential part of the proposed "smart policy mix" on protecting forests is legislation on corporate due diligence. This approach can create a level playing field for companies that are already taking responsibility to address social and environmental risks in their supply chains, and give laggards a push to do so. It can create a culture of accountability, in which companies and other supply

chain actors work to identify, prevent, mitigate, and account for social and environmental risks in their supply chains.

Yet forest protection works only if the public institutions in producing countries have the capacity to play their role in enforcing forest laws (including recognizing and upholding community rights) and if these laws and policies are effective, ambitious, and sensitive to vulnerable groups. It is important to support and incentivize producing countries to design and implement the right policies, and to promote institutional reform if needed, for example through partnership agreements with consuming countries such as those in the European Union.

*The Rainforest Alliance is actively engaged in public policy processes in the European Union (at EU and member state level) as well as in producing countries. Shared responsibility for conversion-free imports is also the goal we advocate for with respect to import legislation, where we think a smart mix of complementary – mandatory and voluntary – approaches is needed to halt deforestation, in which governments, companies, NGOs, producers and communities all take their respective responsibilities, while constantly evaluating their policies and approaches.*

*We work with governments in producing countries to create a better regulatory environment for forest protection, for example by advocating for clarity on protected area boundaries and policies; that local communities are involved in the process; and that they have clarity about their legal situation and conditions.*

## **WE CANNOT DO THIS ALONE**

As society works to address the grand challenge of accommodating the needs of nine billion people while maintaining a habitable and biodiversity-rich planet, there is not only space—but a critical need—for many different strategies and solutions that address the specific circumstances of different commodities, localities, and companies. The Rainforest Alliance has been devoted to this challenge since its foundation more than 30 years ago and can look back to extensive experience, impact, and learning, and yet we acknowledge the limitations of our work.

Progress can only be achieved collaboratively, and when all actors take responsibility. For the Rainforest Alliance, collaboration is part of our name—and at the heart of our mission. This paper is intended to spark discussion about the guiding principles, and about the roles and responsibilities of different stakeholders. We welcome partners from private sector, public sectors, and civil society to help us innovate, constructively review and comment on our interventions, and hold us accountable to our principles, our vision, mission, and goals. Together with you, we are inspired to make the coming years a time of successful ecosystem protection and restoration.

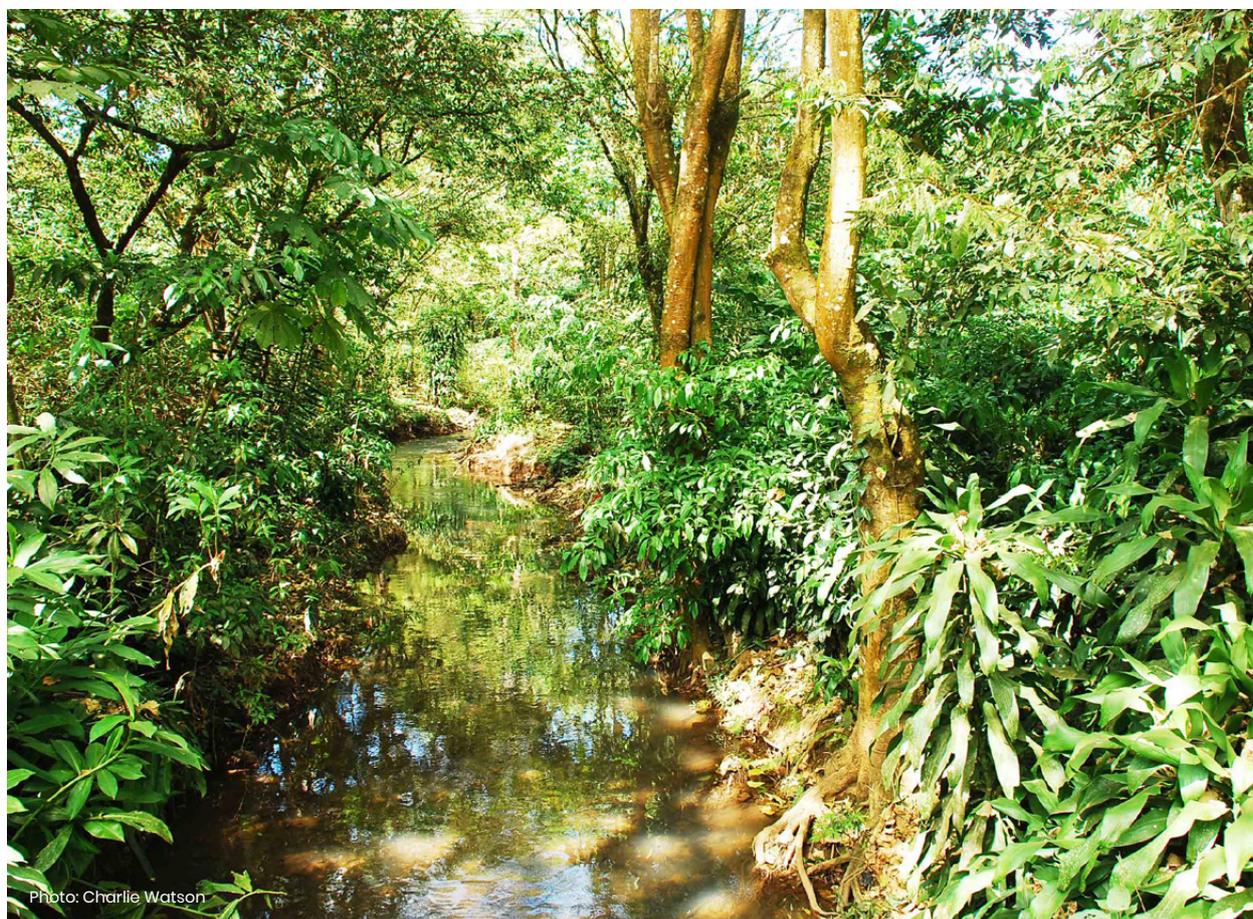


Photo: Charlie Watson

# References

- 1 Griscom BW, Adams J, Ellis PW et al. (2017). Natural climate solutions. *PNAS* 114(44), 11645–11650. [www.pnas.org/content/114/44/11645](http://www.pnas.org/content/114/44/11645)
- 2 Chao S. (2012). *Forest peoples: Numbers across the world*. Moreton-in-Marsh, UK: Forest Peoples Programme. [www.forestpeoples.org/sites/fpp/files/publication/2012/05/forest-peoples-numbers-across-world-final\\_0.pdf](http://www.forestpeoples.org/sites/fpp/files/publication/2012/05/forest-peoples-numbers-across-world-final_0.pdf)
- 3 Weisse M, Goldman L. (2020). We lost a football pitch of primary rainforest every 6 seconds in 2019. *Global Forest Watch* blog post, 2 June. <https://blog.globalforestwatch.org/data-and-research/global-tree-cover-loss-data-2019>
- 4 Curtis PG, Slay CM, Harris NL, Tyukavina A, Hansen MC. (2018). Classifying drivers of global forest loss. *Science* 361(6407), 1108–1111. <https://science.sciencemag.org/content/361/6407/1108.full>
- 5 Commodity-driven in this case is defined by the long-term, permanent conversion of forest and shrubland to a nonforest land use such as agriculture (including oil palm), mining, or energy infrastructure; shifting agriculture as small- to medium-scale forest and shrubland conversion for agriculture that is later abandoned and followed by subsequent forest regrowth; in the following we will refer more broadly to “agriculture-driven” focusing mainly at agricultural production for international supply chains.
- 6 Thomson E, Rogerson S. (2020). *Forest 500 Annual Report 2019 – The companies getting it wrong on deforestation*. Oxford, UK: Global Canopy. <https://forest500.org/publications/forest-500-annual-report-2019-companies-getting-it-wrong-deforestation>
- 7 NYDF Assessment Partners. (2019). *Protecting and restoring forests: A story of large commitments yet limited progress. Five-Year Assessment Report*. New York Declaration on Forests. <https://forestdeclaration.org/images/uploads/resource/2019NYDFReport.pdf>
- 8 Afi (2020). *About the Accountability Framework Initiative*. <https://accountability-framework.org/the-initiative/>
- 9 Rainforest Alliance. (2020). *Rainforest Alliance 2020 Certification Program*. New York: Rainforest Alliance <https://www.rainforest-alliance.org/business/resource-item/whats-in-our-2020-certification-program-deforestation/>
- 10 Rainforest Alliance. (2020). *What’s in Our 2020 Certification Program? Deforestation*. New York: Rainforest Alliance <https://www.rainforest-alliance.org/business/resource-item/whats-in-our-2020-certification-program-deforestation/>
- 11 Rainforest Alliance. (2020). *Annual report 2019*; <https://www.rainforest-alliance.org/annual-report>
- 12 Rainforest Alliance. (2019). *Sustainable coffee helps protect iconic national park in Sumatra, Indonesia*. June 19. [www.rainforest-alliance.org/article/sustainable-coffee-helps-protect-iconic-national-park-in-sumatra-indonesia](http://www.rainforest-alliance.org/article/sustainable-coffee-helps-protect-iconic-national-park-in-sumatra-indonesia)
- 13 Rainforest Alliance. (2016). *Community forestry combats urgent threats in Cameroon*. October 11. <https://www.rainforest-alliance.org/articles/community-forestry-combats-urgent-threats-in-cameroon>
- 14 Rainforest Alliance. (2020). *Rainforest Alliance Sustainable Agriculture Standard: Farm Requirements*. New York: Rainforest Alliance. [www.rainforest-alliance.org/business/wp-content/uploads/2020/06/2020-Sustainable-Agriculture-Standard-Farm-Requirements-Rainforest-Alliance.pdf](http://www.rainforest-alliance.org/business/wp-content/uploads/2020/06/2020-Sustainable-Agriculture-Standard-Farm-Requirements-Rainforest-Alliance.pdf)
- 15 Rainforest Alliance. (2019). *Preparing cocoa farmers for climate change*. July 12. [www.rainforest-alliance.org/article/preparing-cocoa-farmers-for-climate-change](http://www.rainforest-alliance.org/article/preparing-cocoa-farmers-for-climate-change)
- 16 Rainforest Alliance (2020). *What’s in our 2020 Certification Program? Continuous improvement*. <https://www.rainforest-alliance.org/business/resource-item/whats-in-our-2020-certification-program-continuous-improvement/>
- 17 EcoCare Ghana. (2020). *Community engagement for the MoCCPA project implementation*. September 15. [www.ecocareghana.org/community-engagement-for-the-moccpa-project-implementation-2/](http://www.ecocareghana.org/community-engagement-for-the-moccpa-project-implementation-2/)
- 18 1,000 Landscapes for 1 Billion People: A radical collaboration for resilient communities and restored nature. <http://landscapes.global>
- 19 Rainforest Alliance. (2018). *Community: The secret to stopping deforestation in Guatemala*. <https://www.rainforest-alliance.org/articles/community-the-secret-to-stopping-deforestation-in-guatemala>
- 20 Rainforest Alliance (2020). *Forest Allies*. <https://www.rainforest-alliance.org/business/forest-allies/>
- 21 Rainforest Alliance. (2020). *Cocoa: Origin Mass Balance*. October 1. [www.rainforest-alliance.org/business/responsible-sourcing/supply-chain-certification/cocoa-origin-mass-balance/](http://www.rainforest-alliance.org/business/responsible-sourcing/supply-chain-certification/cocoa-origin-mass-balance/)
- 22 Rainforest Alliance. (2020). *Audit allocation system implementation in Ivory Coast and Ghana*. New York: Rainforest Alliance. [www.rainforest-alliance.org/business/wp-content/uploads/2020/04/Rainforest-Alliance\\_Audit-Allocation-System\\_Overview.pdf](http://www.rainforest-alliance.org/business/wp-content/uploads/2020/04/Rainforest-Alliance_Audit-Allocation-System_Overview.pdf)
- 23 LandScale: Discover and communicate trusted landscape-level insights. [www.landscape.org](http://www.landscape.org)
- 24 Rainforest Alliance. (2020). *Rainforest Alliance Sustainable Agriculture Standard: Supply Chain Requirements*. New York: Rainforest Alliance. [www.rainforest-alliance.org/business/wp-content/uploads/2020/06/Rainforest-Alliance-2020-Sustainable-Agriculture-Standard\\_Supply-Chain-Requirements.pdf](http://www.rainforest-alliance.org/business/wp-content/uploads/2020/06/Rainforest-Alliance-2020-Sustainable-Agriculture-Standard_Supply-Chain-Requirements.pdf)

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