



ORIGIN PERFORMANCE AND RISK REPORT

COFFEE SNAPSHOT

Colombia





INTRODUCTION

Our “Coffee Snapshot” series provides stakeholders—from roasters to buyers—with a localized overview of the key sustainability challenges in different coffee producing origins. This “snapshot” report, focused on Colombia during 2020–2022, summarizes trends emerging from an analysis of our own internal proprietary data, external research, and expert input. In other words, the insights and recommended sustainability interventions highlighted here reflect the collective “hive mind” of our ever-growing global alliance.¹



KEY SUSTAINABILITY ISSUES²

LIVING INCOME

COFFEE PROFITABILITY

CLIMATE CHANGE

DEFORESTATION

WORKERS RIGHTS

¹ The report is not meant to highlight how Rainforest Alliance farms are performing compared to non-certified farms. The analysis first looks at priority issues within the value chain in the country of focus and then analyzes Rainforest Alliance farms' performance amidst the priority issues. More details on the data sources used and methodology can be found at the end of the report

² That is not to say that there are no other issues present, however, these are the key issues that research concludes are needing the most attention currently.

THE COFFEE SECTOR IN COLOMBIA

Although coffee is still an important agricultural commodity in Colombia, the coffee share of GDP has significantly declined over the past 40 years (from more than 20 percent of the agricultural share of GDP to less than 10 percent). Factors related to climate variability, increased production costs, labor shortages, and price volatility have affected the coffee industry and could contribute to future declining production in some traditional coffee growing areas of in Colombia.³

³Rainforest Alliance 2022; Saenz et al 2021; Alvarez 2017



543,000

Total coffee producers

720,000

Direct jobs across value chain

8%

Share of global coffee production

**13 MILLION
60-kg BAGS**

Coffee production 2021/2022

96%

Smallholder coffee farmers (<5 HA)

69%

Total coffee production from smallholders

MAIN CROP HARVEST



**3RD LARGEST COFFEE
EXPORTER GLOBALLY**

1.5 HA
AVG farm size

16 60-KG BAGS/HA
AVG yield

Sources: Rainforest Alliance 2022; USDA 2022; Solidaridad 2021; USDA 2018; FAOSTAT 2020; Suárez et al 2021

33%

Of total country volume Rainforest Alliance Certified

3.675 MILLION

60-kg bags Rainforest Alliance Certified coffee

19,813

Certified producers

133,077

Workers on certified farms, permanent and seasonal

Sources: Rainforest Alliance 2021/2022*, USDA 2022 *Certified figures are the sum of UTZ Certified and Rainforest Alliance 2020/2021 totals with and estimated 30% of multiple certification taken into consideration

ECONOMIC ISSUES

50–80 percent of coffee growers in Colombia do not earn a living income (at least USD 4,150 per household).⁴ Many would need to increase their household income by 40 percent to bridge the living income gap.⁵

Just over half of Colombia's coffee farmers (approximately 270,000) have less than 1 ha planted with coffee and are largely dependent this single crop as their main source of income (60–90 percent of total household income). More than 31 percent of growers declare that their income does not cover minimum expenses. This is due, in part, to the fact that prices do not always cover direct production costs, time, and effort for many farmers. At the same time, many farmers do not maintain sufficient records of household economics to help improve this.⁶



KEY ISSUES

LIVING INCOME

COFFEE PROFITABILITY



⁴ "Responsible Coffee Sourcing: Towards a Living Income for Producers" by Kaitlin Y. Cordes, Margaret Sagan et al. (Columbia.edu)

⁵ Rainforest Alliance 2022; CCSI 2021; ICO 2022; IDH 2022.

⁶ Rainforest Alliance 2022; Acuerdo Café Bosque y Clima 2021

LIVING INCOME

50–80 percent of coffee growers in Colombia do not earn a living income (at least USD 4,150 per household). Many would need to increase their household income by 40 percent to bridge the living income gap.⁷

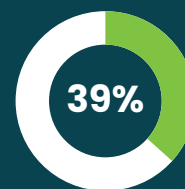
Just over half of Colombia's coffee farmers (approximately 270,000) have less than 1 ha planted with coffee and are largely dependent this single crop as their main source of income (60–90 percent of total household income). More than 31 percent of growers declare that their income does not cover minimum expenses.

This is due, in part, to the fact that prices do not always cover direct production costs, time, and effort for many farmers. At the same time, many farmers do not maintain sufficient records of household economics to help improve this.⁸



COFFEE FARMERS' % INCOME FROM COFFEE

With an avg of 60–90% of total income



NATIONAL POVERTY RATE

Meaning 39% of the population lives on less than USD 3/day

\$ USD

1,369–3,125

RANGE HOUSEHOLD NET CASH INCOME

\$ USD

4,150

BENCHMARK NET LIVING INCOME (Avg. during 2021)⁹

KEY CHALLENGES TO REACHING A LIVING INCOME FOR COFFEE GROWERS IN COLOMBIA

SMALL FARM SIZE

51% families have 1HA or less of land

HIGH DEPENDENCY ON COFFEE

Which has increased in the past years

LOW COMPENSATION

Income does not cover minimal household expenses for an estimated 31% of growers

LACK OF EDUCATION

Affects opportunities to improve on quality advantages to earn from speciality coffee

Sources: Rainforest Alliance 2021 & 2022; World Bank 2022; Reuters 2022; We the Origin 2020; Acuerdo Caf e Bosque y Clima 2021

RECOMMENDED INTERVENTIONS

“Coffee prices matter, but investments in farmer trainings are also important for living income. Together, companies and supply chain actors can start the process by providing trainings and technical support to farmers so that they can embrace more sustainable practices that help improve their yields and the quality of their products. They can also support income diversification by helping farmers to access markets, rewarding them with better prices for specialty coffee, or offering guaranteed minimum prices.”

– Miguel Gamboa, Sector Lead, Coffee, Rainforest Alliance

⁷ Rainforest Alliance 2022; CCSI 2021; ICO 2022; IDH 2022

⁸ Rainforest Alliance 2022; Acuerdo Caf e Bosque y Clima 2021

⁹ “Responsible Coffee Sourcing: Towards a Living Income for Producers” by Kaitlin Y. Cordes, Margaret Sagan et al. (Columbia.edu)

COFFEE PROFITABILITY

If growing coffee doesn't make business sense for farmers, especially young farmers, they will switch to more lucrative crops (such as avocado or citrus) or abandon farming altogether.

Like many coffee farmers throughout the world, Colombian coffee farmers are facing unprecedented challenges. Climate change is altering harvest periods (moving from two distinct seasons to trickling year-round production), fertilizer prices are at an all-time high (40 percent increase from 2021), and labor is scarce (many workers are now migrants from Venezuela).¹⁰ Managing coffee economics requires a holistic approach that balances producers' income (cost of production and profitability) and social development (quality of life) with climate-resilient production and better preservation of natural capital.¹¹

COLOMBIA

16

60-KG
BAGS/HA

BRAZIL

29

60-KG
BAGS/HA

VIETNAM

46

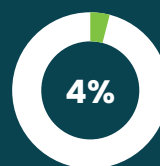
60-KG
BAGS/HA



Estimated fertilizer cost increase 2022 vs 2021



Total country production decline due to heavy rainfall for 2022/2023



% of land under coffee cultivation abandoned due to low prices in 2019



Estimated costs of labor as total % of coffee production costs

Sources: Rainforest Alliance 2022; Pulitzer Center 2022; ESM 2022; USDA 2022; Reuters 2022; Yale Environment 360 2019

KEY DRIVERS AFFECTING COFFEE PROFITABILITY¹²

LOW PRODUCTIVITY

Colombian coffee is grown on steep hills, which means harvesting takes more time. This puts the sector at a competitive disadvantage compared to Brazil and Vietnam.

EXTERNAL FACTORS

Weather and rising fertilizer costs have hampered profitability.

LABOR SHORTAGE

A rural labor shortage impacts cost of production and leaves the coffee crop overly exposed to pests and incorrect timing of harvest. Small farmers rely on family labor, which is a challenge when youth move to cities.

Poor farmer profitability is detrimental for the entire coffee industry Farmers will switch to other crops or abandon farms, leading to overall supply declines.

Better prices and sustainable farming practices that help increase productivity and climate resilience must be part of the solution.

RECOMMENDED INTERVENTIONS

“Maintaining high yields, while balancing production costs is a growing challenge for farmers, but one that can be addressed through joint actions. Trainings and technical support in good agricultural practices that address key issues related to soil fertility, plant nutrition, and plant hygiene can help curtail the outbreak of pests. Companies should also develop long-term plans, like helping farmers transition to regenerative practices—like composting and cover cropping—that reduce farmer dependence on costly inputs, like fertilizers.”

– Miguel Gamboa, Sector Lead, Coffee, Rainforest Alliance

¹⁰ La Patria newspaper, January 3, 2020 “Difícil saber cuántos recolectores son venezolanos” (lapatria.com)

¹¹ Rainforest Alliance 2022; Daily Coffee News 2022; Coffee Intelligence 2022

¹² Rainforest Alliance 2022; Pulitzer Center 2022; ESM 2022; USDA 2022; Reuters 2022; Yale Environment 360 2019

ENVIRONMENTAL ISSUES

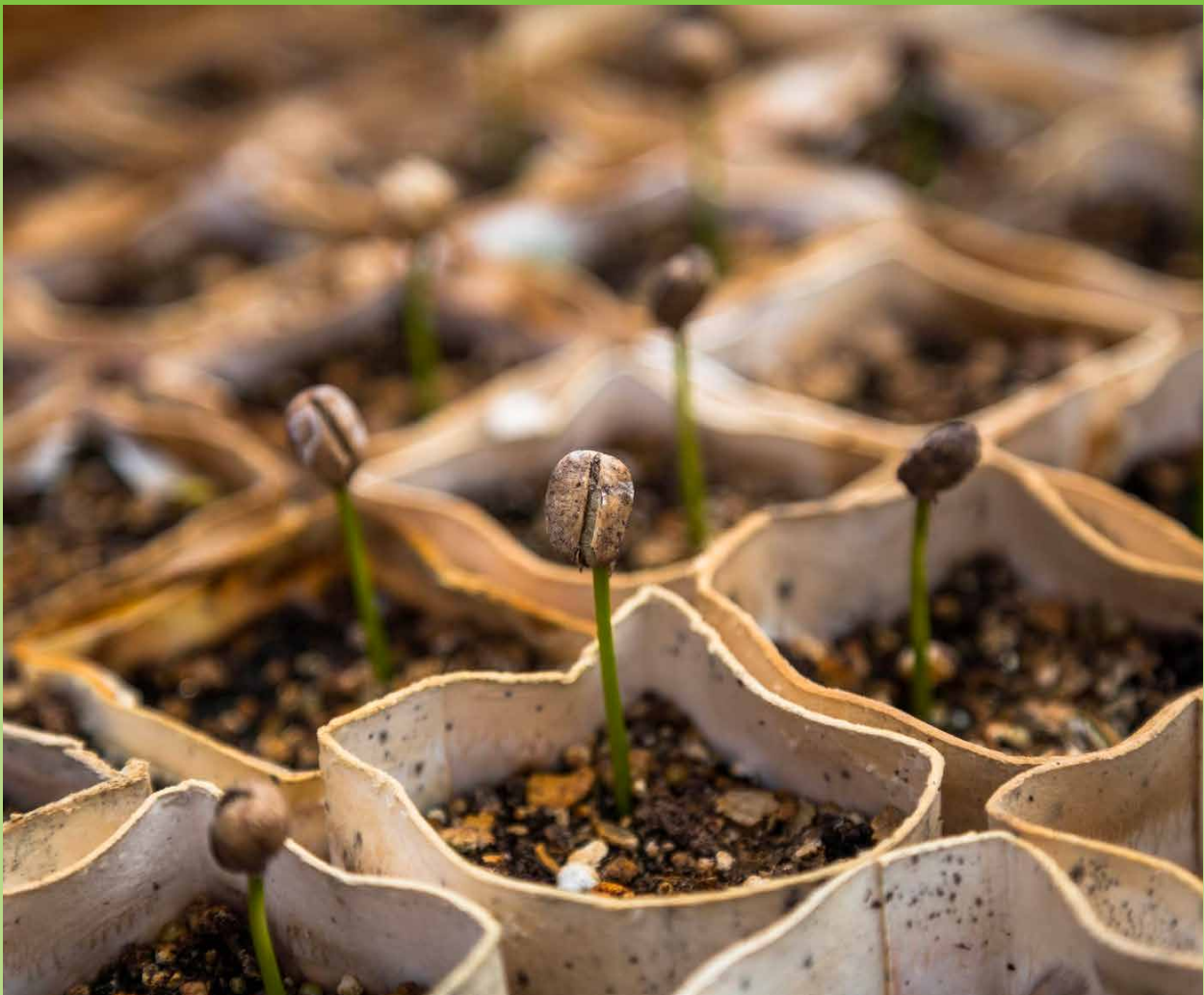
Regenerative agricultural practices are key for addressing climate change and deforestation. Climate change is causing erratic rainfall and dry spells, which reduces the number of sunny days needed to ripen coffee. These climatic changes are altering harvest seasons, as well as productivity, and forcing some smallholders to move to higher altitudes, clearing natural vegetation and further exacerbating biodiversity loss.



KEY ISSUES

CLIMATE CHANGE

DEFORESTATION



CLIMATE CHANGE

The impacts of climate change on coffee production vary across different parts of Colombia: Low altitude farms may face an 8 percent decline in productivity by 2061, while farmers at 1,500 meters and above may experience a 16 percent increase.¹³

The impacts of climate change on the Colombian coffee sector are already present, and they are expected to intensify. Productivity levels are lower for farmers with no adaptation measures in place, putting their profitability under even more pressure. For example, an increase in pests requires more pesticides, which translates into more expensive production. Adaptation requirements are a challenge for the 96 percent of growers that are smallholders who don't have the means to invest a lot in their production.¹⁴

OBSERVED AND PREDICTED EFFECTS

RISING TEMPERATURES

0.3 degrees celsius increase per decade

CHANGING RAINFALL

(E.G. extreme rainfall leading to floods)

LOSS OF SUNLIGHT

19% decline in hours of sunlight since 1950

CHANGING SEASONALITY

Moving from 2 distinct harvests to more continual

Sources: Rainforest Alliance 2022; Ceballos-Sierra 2021; University of Illinois College of Agricultural, Consumer and Environmental Sciences 2021; USAID, 2018; UK MetOffice, 2011; Hagggar J, Schepp K, 2012; Ruiz-Cárdenas R, 2015

ADAPTATION MEASURES FOR FARMERS AT LOWER ALTITUDES

¹³ Rainforest Alliance 2022; Ceballos-Sierra 2021; University of Illinois College of Agricultural, Consumer and Environmental Sciences 2021

¹⁴ Rainforest Alliance 2022; Solidaridad 2019

SUSTAINABLE AGRICULTURE

Farmers need training and technical support for improved growing practices, such as irrigation, agroforestry, and shifting to different coffee varieties.

EXTERNAL FACTORS

Farmers will need support switching to other crops and/or alternative sources of income.¹⁵



RECOMMENDED INTERVENTIONS

"Supply chain actors should take immediate actions to help coffee farmers increase climate resilience by investing in technical support and training from local and regional agronomists. This kind of hands-on support can help farmers embrace climate-smart farming practices, such as intercropping shade trees, planting cover crops, and conserving riparian buffers. Planting drought resistant varieties can also really help farmers prepare for future challenges."

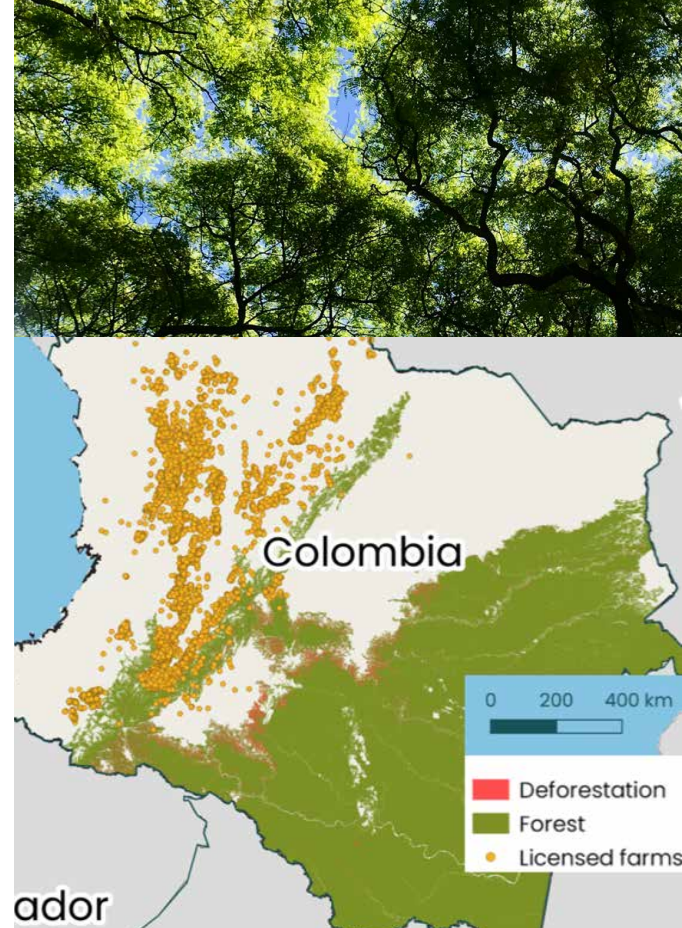
-Dr. Celia Harvey, Climate Lead, Rainforest Alliance

¹⁵ Rainforest Alliance 2022; Perfect Daily Grind 2021; Wall Street Journal 2022; NPR 2021; DaMatta et al 2006

DEFORESTATION

As coffee cultivation areas shift due to climate change, there will be increased pressure on deforestation in the higher areas (1,500 meters or above).

From 2001 to 2021, Colombia lost 4.93 million hectares of tree cover, equivalent to a 6 percent decrease in tree cover since 2000. Since a peace agreement was signed in 2016 between the Colombian government and the Revolutionary Armed Forces of Colombia (FARC), deforestation skyrocketed by 40 percent. Currently, coffee does not contribute significantly to deforestation, especially in comparison to coca and livestock. However, as climate change affects the suitability of lower areas for coffee cultivation, the risk of degrading and deforesting the sub-Andean and Andean forests will increase as farmers are pressured to migrate to the higher, mountainous regions.¹⁶



Sources: Rainforest Alliance 2022; World Bank 2021; UN Biodiversity Lab 2021

PROTECTED AREAS



FOREST



DEFORESTATION



LICENSED FARMS



RECOMMENDED INTERVENTIONS

"Deforestation is one of the largest drivers of global biodiversity loss as well as climate change. Actors across the coffee supply chain can take concrete action by investing in proven approaches, like Integrated Community Forest Management, that promote the role of local communities as our best forest guardians. Companies should also actively engage suppliers in setting deforestation free commitments in line with the Accountability Framework Initiative."

-Samantha Morrissey, Sector Lead, Forests, Rainforest Alliance

¹⁶ Rainforest Alliance 2022; Global Forest Watch 2022; Earth 2022

GHG EMISSIONS

At the farm level, most GHG emissions stem from the use of fertilizers, pesticides and fossil fuel (for transport, drying and processing). If coffee production encroaches into adjacent forest areas, the loss of forest cover can also result in significant GHG emissions at the wider landscape level. To reduce the carbon footprint of the coffee sector, there is a need to reduce the use of synthetic pesticides and fertilizers, promote the use of renewable energy, and avoid the deforestation and degradation of forests in coffee landscapes.

WATER USAGE

Water is an essential natural resource for coffee production. Most smallholder farmers implement low-tech systems that are very inefficient, using 20 to 40 liters of water per kg of dry parchment coffee. They also lack water treatment systems, discharging the processing and domestic wastewater directly into the soil and water bodies, with potential negative consequences for the environment.¹⁷



¹⁷ [Manos al Agua 2013](#)

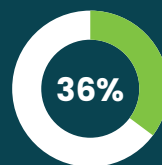
SOCIAL ISSUES

Low farm profitability and labor scarcity is putting pressure on workers' rights and well-being, namely wages, safe working conditions, and the risk of child labor.

WORKERS' RIGHTS

96 percent of coffee growers have less than 5 ha of farmland, and most of the coffee is manually harvested by seasonal workers, mainly from Venezuela (90 percent).

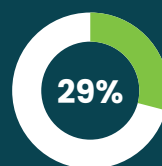
The low profitability of coffee as a business in Colombia trickles down to the 720,000 workers relying on coffee for income. When coffee growers are squeezed financially, it directly affects workers' wages, their well-being, and heightens the risk of child labor.¹⁸



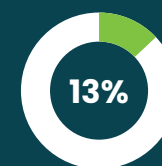
Of workers receiving less than legal minimum wage 2015, during main harvest



Of workers receiving less than legal minimum wage 2015, during mid-season harvest



Average % non-compliance on Rainforest Alliance Certified farms
Agrochemical handling in terms of proper usage, application and cleaning of containers



Average % non-compliance on Rainforest Alliance Certified farms
Written contracts for employment longer than 3 months

3%

OF CHILDREN (AGED 5-14 YEARS) ENGAGED IN CHILD LABOR IN COLOMBIA

An estimated 210,00 children

47%

% OF TOTAL WORKING IN AGRICULTURE

An estimated 98,000 children

Sources: Rainforest Alliance 2022; Fernández 2019; Sprudge 2020; SOMO 2016; Coffee Intelligence 2022; DOL 2021

KEY DRIVERS

LABOR SCARCITY

Urbanization and competition from higher paying jobs has led to a labor shortages. For now, migrant workers from Venezuela are filling the vacuum but that is likely only temporary.

LOW WAGES

Wages are based on the number of kilos harvested. While some workers can earn above the country's minimum wage of US\$ 250, the seasonality of harvesting means work is informal, unstable, and iterant.

WORKERS' RIGHTS AND WELL-BEING

The informal nature of coffee picking means that many workers do have formal contracts or access to proper safety equipment or training on how to handle hazardous agrochemicals.

CHILD LABOR

has improved but it is still endemic, both amongst the children of Colombian farmers and migrant workers.

RECOMMENDED INTERVENTIONS

"Workers' rights issues such as low wages, lack of contracts, and worker safety are symptoms of wider social challenges. Improving workers' rights is largely rooted in addressing the profitability of coffee farming and can be supported by addressing poor prices and living income gaps that often drive farmers to pay low wages and engage in child labor. Additional interventions such as awareness-raising activities and implementing assess-and-address programs that identify and track cases of worker abuse, including child labor, are all steps that supply chain actors can take."

- **Kunera Moore, Global Themes Lead Forced Labor, Rainforest Alliance**

¹⁸ Rainforest Alliance 2022; Fernández 2019; Sprudge 2020; SOMO 2016; Coffee Intelligence 2022; DOL 2021

CONCLUSIONS AND RECOMMENDATIONS

The challenges in Colombia are complex and interconnected. For example, addressing coffee profitability requires helping farmers adopt climate-smart practices and encouraging farmers to avoid expanding into forested areas. Improving worker wages requires an examination of poor coffee prices and the living income gaps that farmers face. Recognizing how connected these issues are is the first step in building holistic interventions.

The Rainforest Alliance has worked with several companies, NGOs, and government agencies to drive change in Colombia. Our current work includes:

COCOA FOR LIFE

Cocoa for Life aims to promote zero-deforestation cocoa production over nearly 5,000 hectares of productive landscapes on the Amazon Piedmont. We work closely with our partners GIZ, UK Pact, and local producer association, ASOPROCACAO.

FOREST ALLIES

Through Forest Allies, we are working to strengthen community forest management in Guaviare, Colombia to bring 40,000 hectares under sustainable forest management plans, develop more sustainable value chains, and bring benefits for 250 local families.

AMAZON BIOECONOMY MARKET

This project aims to improve socioeconomic conditions, fight climate change, and help restore ecosystems in the Amazon regions of Colombia and Ecuador by supporting the growth of export-oriented bio-businesses. Planned activities include the development of an online Amazon Bioeconomy Marketplace (ABM).

ALLIANCE FOR LANDSCAPES

Developed in Caquetá, this project aims to scale-up reductions in commodity-driven deforestation, while accelerating climate mitigation and restoration by demonstrating the business case for collective landscape action.



METHODOLOGY AND DATA SOURCES

This report draws upon a wide range of internal propriety data: certification data, internal risk maps, project monitoring and evaluation data, and expert opinions. It also draws on various external sources, including coffee industry reports, project reports, country-specific legislation, and academic literature. While several sources are used, there are limitations in the completeness of all the datasets used. Therefore, the weighing of risks is based on the frequency they are mentioned, focusing on the probability of occurrence, not necessarily on the severity of impacts.¹⁹

RISK MONITORING AND CERTIFICATION: ADVANCES IN OUR 2020 SUSTAINABLE AGRICULTURE STANDARD

Our 2020 Sustainable Agriculture Standard includes many new indicators for certificate holders to report on. The first set of these indicators will include:

HUMAN RIGHTS VIOLATION CASES **SUSTAINABILITY INVESTMENT NEEDS** **LIVING WAGE DATA**
PERCENT OF WOMEN PARTICIPATING IN TRAINING **MANAGEMENT CAPACITY ASSESSMENTS**

*Data from 2021 is being processed and will become available in 2022

¹⁹ The data presented is accurate at the time of publication based on the information collected from the above sources. Rainforest Alliance will not be liable for damage due to inaccuracies in the information. For more information about the method of analysis and sources, please contact us at talloredservices@ra.org.

ABOUT THE RAINFOREST ALLIANCE



The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect people and nature. Our alliance spans 70 countries and includes farmers and forest communities, companies, governments, civil society, and millions of individuals. Together we work to protect forests and biodiversity, take action on climate, and promote the rights and improve the livelihoods of rural people.

