COFFEE

The World's First Sustainable Commodity

CONSERVATION INTERNATIONAL

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Despite severe challenges facing coffee, collectively we can transform coffee into the world's first sustainable agricultural product.

WHY COFFEE?

Over centuries, coffee has become a staple in nearly every corner of the world. People drink about 600 billion cups of coffee every year. It's also a US$22 billion global industry that provides essential income for millions of people across the sector, including over 25 million smallholder farmers who also serve as important stewards for the world's tropical forests.

Demand for coffee is growing fast in large upcoming and developing economies like China and India. Based on these projected scenarios, by 2050 the coffee industry will need to produce between 4 million and 14 million additional tons of coffee per year to meet demand.

Unless growers can significantly increase coffee productivity per hectare on the 10 million hectares of coffee currently under production, the industry will need to double the area under coffee production by 2050. During this same period, climate change is predicted to create conditions where half of the land currently suitable for growing coffee will become unsuitable.

Of all agricultural commodities, coffee is the farthest along on the sustainability journey. Nearly half of production currently complies with a sustainability standard (i.e. certification or verification programs). Collectively, the coffee sector is investing approximately $350 million annually in sustainability efforts, impacting some 350,000 coffee farmers. However, it is hard to know who is doing what and where opportunities for partnerships may arise. Collaborative partnerships will help to scale the impact and efficiency of investments, which would benefit the lives of 25 million producers and position coffee as a driver of sustainable economic development in coffee landscapes.

GLOBAL ENVIRONMENTAL PROBLEMS AND ROOT CAUSES

Coffee, like all agricultural products, depends on nature to thrive. It needs water — in fact, it is estimated the average cup of coffee takes 140 liters of water to grow. It needs soil that has not been flooded, eroded or otherwise degraded. It also relies on steady temperatures — coffee is particularly sensitive to temperature increases, which reduce its growth, flowering and fruiting, and make it more susceptible to coffee pests and diseases. But, just as important, coffee relies on farmers — millions of people throughout the tropics.

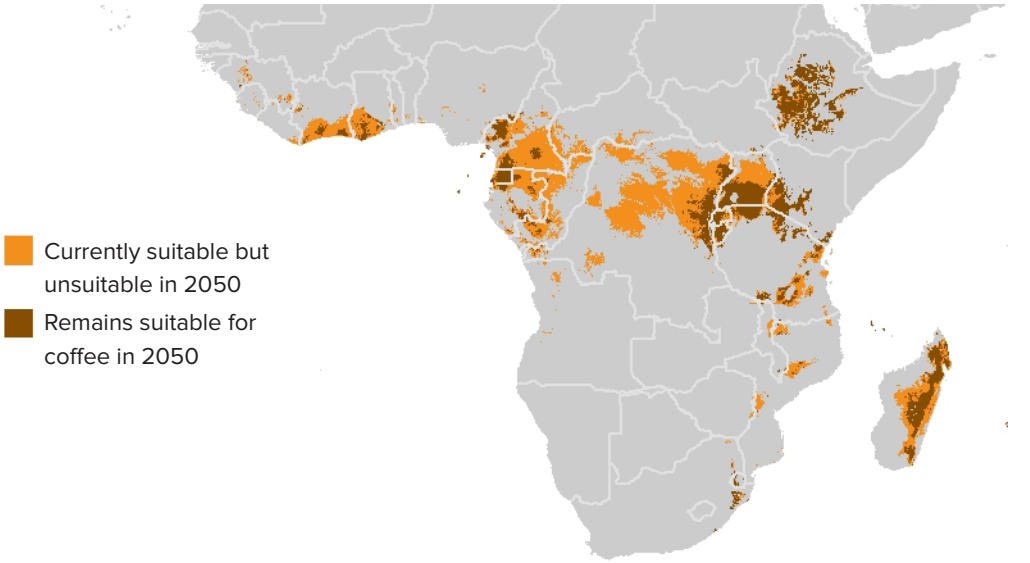
Today, **nearly every major coffee-producing region of the world is under stress**. Coffee production is increasingly impacted by climate change. Rising temperatures, drought and changing weather patterns are causing some major coffee-producing areas of the world to become less suitable for the crop. Recent studies show that the changing climate could potentially cut the world's suitable coffee-growing area in half by 2050.

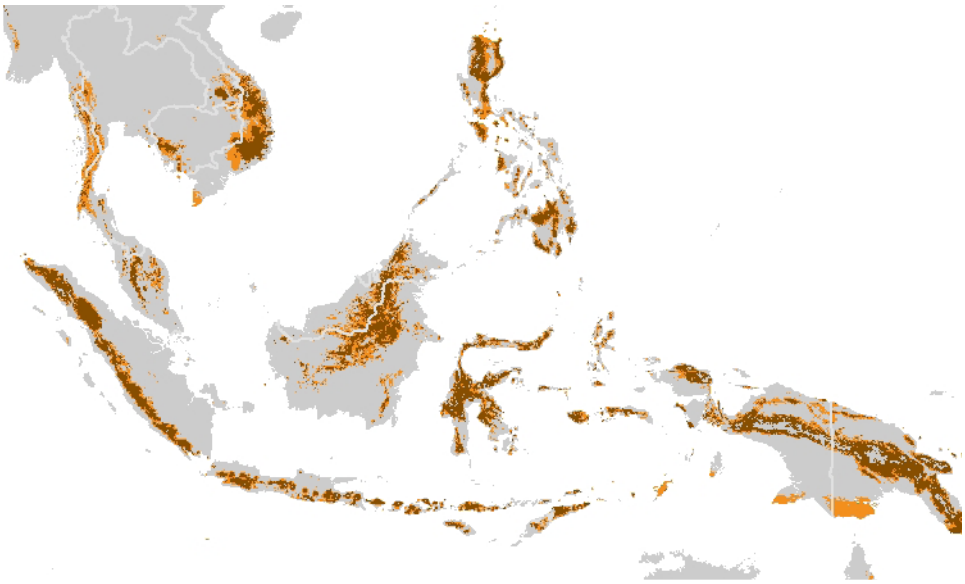
Many forests today will be prime regions for coffee cultivation tomorrow, as the area for suitable coffee growth migrates to higher altitudes. Currently, less than 2% of the land suitable for coffee farming is used to produce coffee, which suggests that there is more than enough land available to meet future demand. Climate change, however, will shift prime production geographies, which will impact current coffee producers and potentially cause them to migrate production to areas currently covered by forest. **Tropical forests currently cover 60% of the landscapes that have climates amenable to coffee plantations.** This value, which is relative, is expected to remain approximately the same, even as coffee-producing geographies shift in elevation and latitude, and become smaller in overall area. If we cannot triple productivity on the existing ~10 million hectares of coffee farms, coffee could become a driver of deforestation.

Most coffee growers are smallholder farmers, whose ability to adapt to climate change without outside help is limited. Research shows that 34% of smallholder coffee trees have passed 20 years of age, significantly reducing yields and increasing the risk of pests and diseases. For instance, between 2008 and 2013 a severe epidemic of coffee leaf rust hit coffee growing regions throughout Central America, including Colombia, Peru, Ecuador, Mexico as well as some Caribbean countries. Low yield farms that have been hit hard are in desperate need of support.

Producers are looking for more lucrative agricultural opportunities outside of coffee, which could lead to divestment or abandonment of some farms in the future. How this will affect coffee production and coffee growers — including the more than 120 million people who depend on the coffee economy for their livelihoods — will vary by region. However, regions of particular concern are the Andes, Central America and Southeast Asia.

The challenge over the next 35 years will be to achieve the goal of zero net deforestation while satisfying increasing demand from coffee consumers, even though the area suitable for coffee cultivation will shrink in size and be displaced by climate change. The industry increasingly needs to focus efforts on addressing the intersection between the health of the environment and the viability of the millions of farmers who grow our coffee.





Maps © Conservation International

CONSERVATION INTERNATIONAL'S EXPERIENCE IN COFFEE

For over 20 years, Conservation International (CI) has been working in partnership with coffee producers and the broader industry to promote sustainable practices that retain the rich biodiversity of coffee producing landscapes.

We have established a renowned coffee program that has **directly impacted coffee producers and their communities across 12 countries throughout Asia, Latin America and Africa**, including Indonesia, Mexico, Costa Rica, Nicaragua, Colombia, Honduras, Peru, El Salvador, Guatemala, Brazil, Rwanda and Ethiopia.

Throughout the past two decades, CI has worked with partners from field to market to support a new paradigm for sustainable coffee production. The various programs[1] and projects across CI have collectively worked to promote improved production practices and develop sustainable coffee landscapes.

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1 Center for Environmental Leadership in Business (CELB), Conservation Stewards Program (CSP), Carbon Fund, CASCADE, Sustainable Landscapes Partnership (SLP)

CONSERVATION INTERNATIONAL'S PROGRAMS IN COFFEE WORK TO PROMOTE SUSTAINABLE PRODUCTION IN 3 WAYS:

Grow the supply

- Encourage practices that combine conservation, production improvements and constructive engagements to achieve sustainable coffee cultivation and improved livelihoods.

Strengthen governance + decision making

- Help develop national and international policy for sustainable coffee and guidance on policy decisions that will promote the adoption of market incentives for sustainable coffee trade.
- Support improved coffee production through research, land use planning and the development of effective incentive programs that promote forest and wildlife conservation.

Promote demand

- Encourage the coffee industry to adopt sustainable sourcing strategies and commitments.
- Help companies develop a pathway for achieving sustainable sourcing commitments by engaging with producers, processors and trading companies to understand and overcome barriers and inefficiencies.

ACHIEVING COFFEE SUSTAINABILITY

LEADING TRANSFORMATION OF THE SECTOR

CI's 20+ years of experience has enabled us to successfully launch the Sustainable Coffee Challenge in December 2015, alongside the UNFCCC COP21 in Paris.

It is estimated that transitioning the coffee sector to make coffee the world's first fully sustainable agricultural product would require a total investment of approximately US$4.1 billion and would take nearly 30 years to affect all the world's coffee producers.

Recognizing that though the coffee industry has been working for decades in sustainability and is commonly known as a leader in sustainable food production, fully transitioning a crop to sustainability requires cooperation across the supply chain – leaders setting aside their competitive differences to help scale practices industry-wide. To change the coffee industry, the sector needs to strengthen market demand and sustain supply, while improving livelihoods and conserving nature in communities where coffee is produced.

The Sustainable Coffee Challenge is a dynamic and diverse coalition of more than 100 partners – including roasters, traders, retailers, governments (e.g. Costa Rica, Mexico, Rwanda, Uganda), NGOs, research institutions and others – to address challenges head on and make coffee the world's first sustainable agricultural product. The Challenge sets out to spark this movement by focusing on increasing transparency, defining common language and sparking more ambitions and collective actions. Although the Challenge is facilitated by Conservation International, the agenda and the actions are led by the Challenge partners. Partners are working together with urgency to align around a common vision for sustainability, set meaningful targets, and collaborate to accelerate progress towards those goals.

To tackle some of the most pressing challenges facing the long-term sustainability of coffee, the Sustainable Coffee Challenge encourages collaboration to effectively replicate and scale up successful programs efficiently.

A key tenet of the Sustainable Coffee Challenge, alongside other global multi-stakeholder initiatives in coffee, is to urge partners to advance on key issues and priorities for the sector through Collective Action Networks. In addition to sharing learnings and best practices in a pre-competitive setting, these networks aim to develop coordinated approaches and quantitative targets at a sector level. Operating as *'Communities of Practice,'* the networks provide a huge opportunity to leverage further collaboration and co-investment through the GEF.

For instance, through one of the networks, we aim to enhance large scale monitoring of coffee production in relation to forest cover to better understand the current footprint. Based on these efforts, we can identify areas where coffee has an opportunity to contribute to reforestation, and where coffee poses the greatest risks for deforestation. This will allow us to effectively guide investments into agroforestry.

Another network is focused on responsible coffee farm renovation and rehabilitation, which is critical to maintain healthy and productive farms. CI's involvement in this approach will ensure that recognized environmental (shade management) and social safeguards (Free, Prior and Informed Consent, Rights-Based Approach) are incorporated in programs, to ensure that renovation projects do not have unanticipated impacts on forest conservation. For example, if farmers cut down old growth or shade trees in addition to replacing non-productive coffee trees, the consequence of deforestation and loss of forest connectivity can lead to deterioration of water resources and biodiversity.

Moving forward, we will continue to encourage demand for sustainable coffee to trigger and drive the type of collaborations and investments that enable the transition to sustainable production. This will help us to ensure the coffee we drink is a sustainable product.

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COFFEE FARM RENOVATION & REHABILITATION COLLECTIVE ACTION NETWORK

It is estimated that there is a **global need to replant 2.2 million hectares (equivalent to 7-10 billion trees) of coffee trees**. To effectively scale renovation programs and investments of various industry actors, the global coffee sector needs a coordinated approach and quantitative targets for renovation.

The Sustainable Coffee Challenge is leading a group of 20+ members, focused on accelerating the responsible renovation or rehabilitation of coffee farms by sharing experiences, incorporating best practices and coordinating efforts and resources.

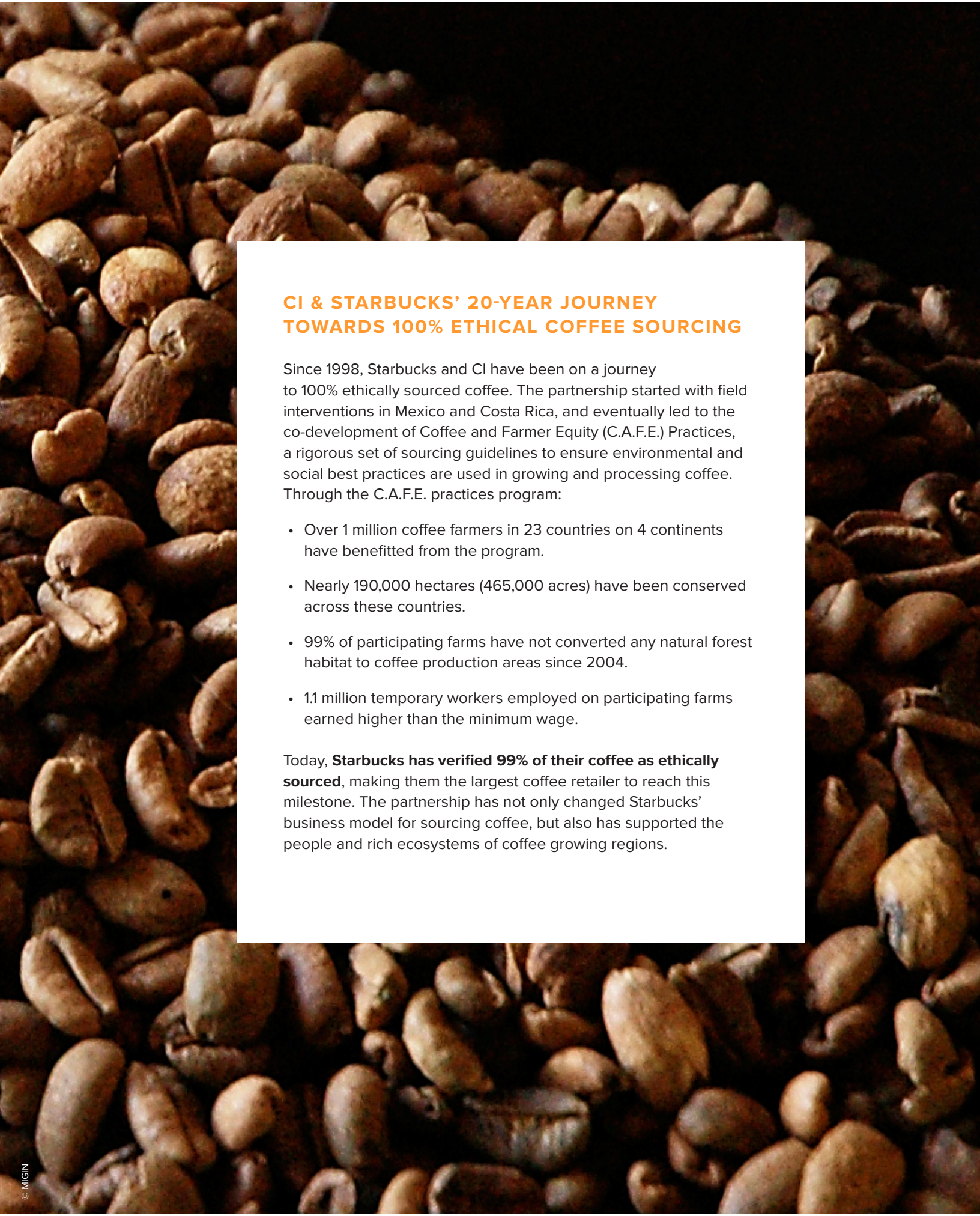
More specifically, the group aims to distribute knowledge on renovation and rehabilitation and create incentives for the private sector to improve farmer yields and meet future demand for coffee by setting a joint commitment to sustainably renovate / rehabilitate 1 billion trees.

As part of this effort, the group will work to incentivize forest restoration on coffee farms.

CHALLENGE PARTNERS

An important component of our coffee work has been focused on **bilateral partnerships with key influencers within the coffee sector – retailers, roasters and trading companies in particular – to develop sourcing and investment strategies** that establish the necessary incentives for sustainable coffee production. For instance, CI has been working for twenty years with Starbucks Coffee Company. This innovative partnership stems from ground work with coffee farmers – from introducing communities to the emerging forest carbon market, to creating farmer loans, to the Coffee and Farmer Equity (C.A.F.E.) Practices program – and has inspired us to collectively lead the efforts to make coffee the world's first sustainable agricultural product! In addition to Starbucks, CI has also established bilateral partnerships on coffee with other leading companies, such as McDonald's, S&D Coffee and Tea, ECOM Agroindustrial, Walmart and Disney.

CI's expertise on promoting sustainable sourcing and production of coffee has enabled us to actively engage in a variety of leading multi-stakeholder initiatives in the sector, such as the initiative for Coffee & Climate, the Coalition for Coffee Communities, the Alliance for Resilient Coffee funded by USAID's Feed the Future Program – and others. These initiatives have helped us influence the agendas of NGO's and industry members, and scale our conservation efforts in coffee-sourcing regions. These strong partnerships that have been established across the sector have enabled significant donor and in-kind financial investments and commitments from governments and companies.



CI & STARBUCKS' 20-YEAR JOURNEY TOWARDS 100% ETHICAL COFFEE SOURCING

Since 1998, Starbucks and CI have been on a journey to 100% ethically sourced coffee. The partnership started with field interventions in Mexico and Costa Rica, and eventually led to the co-development of Coffee and Farmer Equity (C.A.F.E.) Practices, a rigorous set of sourcing guidelines to ensure environmental and social best practices are used in growing and processing coffee. Through the C.A.F.E. practices program:

- Over 1 million coffee farmers in 23 countries on 4 continents have benefitted from the program.
- Nearly 190,000 hectares (465,000 acres) have been conserved across these countries.
- 99% of participating farms have not converted any natural forest habitat to coffee production areas since 2004.
- 1.1 million temporary workers employed on participating farms earned higher than the minimum wage.

Today, **Starbucks has verified 99% of their coffee as ethically sourced**, making them the largest coffee retailer to reach this milestone. The partnership has not only changed Starbucks' business model for sourcing coffee, but also has supported the people and rich ecosystems of coffee growing regions.

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EXAMPLES OF CONSERVATION INTERNATIONAL'S WORK IN COFFEE


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ONE TREE FOR EVERY BAG

CI has been supporting Starbucks in the implementation of a bold commitment that the company set out in 2015 - ***For every bag of coffee sold in participating Starbucks' stores in the United States; one new rust-resistant coffee tree will be provided to farmers in places most impacted by coffee leaf rust: Mexico, El Salvador and Guatemala***. Since the program launched in September 2015, Starbucks has donated enough funds to CI to plant 25 million rust-resistant coffee trees, 10 million of which have already been distributed to more than 6,000 farmers in need across El Salvador, Guatemala and Mexico. The new seedlings positively impacted over 2,800 hectares of coffee area. To build on the success of the One Tree for Every Bag program, Starbucks has committed to provide 100 million healthy coffee trees to farmers by 2025.


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MCCAFE SUSTAINABILITY IMPROVEMENT PLATFORM

In 2014, McDonald's committed to making the coffee in every cup of McCafé sustainable by 2020, specifically, to ensure that 100% of the coffee served comes from sources supporting sustainable production. In October of 2016, alongside Conservation International, McDonald's launched the McCafé Sustainability Improvement Platform, or McCafé SIP, a framework that will help the company engage the entire coffee value chain in sustainable sourcing, while also providing long-term investments to strengthen the coffee growing communities in the supply chain. This framework enables McDonald's roasters to leverage their expertise and relationships at origin to innovate and advance sustainable farming practices.

INCREASING ADAPTATION CAPACITY OF SMALLHOLDER IN CENTRAL AMERICA (CASCADE)

Conservation International partnered with the Tropical Agricultural Research and Higher Education Center (CATIE) to identify and test ecosystem-based adaptation (EbA) strategies — such as restoring and protecting forests to ensure future water supply and prevent landslides — that use nature as a tool to help smallholder farming communities adapt to climate change. The five-year research project focused on smallholders in several agricultural crops, including coffee, in Costa Rica, Honduras and Guatemala. This project is part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) supports this initiative on the basis of a decision adopted by the German Bundestag.

PROTECTING THE FORESTS OF ALTO MAYO, PERU

Since 2009, CI-Peru has concentrated its conservation efforts in the Alto Mayo Protected Forest, situated in the northern region of the country. With support from Disney, CI's largest REDD+ corporate partner, CI is addressing the main causes of deforestation with incentive-based conservation agreements. One of the main economic activities in the region is coffee production, which has been clearly identified as a driver of deforestation and greenhouse gas emissions. To date, roughly 1,000 families have pledged not to cut down the Alto Mayo's trees in return for agricultural training to improve coffee production on existing land, as well as for other benefits like educational materials and medical supplies. Farmers who signed conservation agreements are benefitting from increased productivity and higher incomes.

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Our Mission
Building upon a strong foundation of science, partnership and field demonstration, CI empowers societies to responsibly and sustainably care for nature, our global biodiversity, for the well-being of humanity.

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