



**WORKING TOWARD SUSTAINABLE COFFEE:
RAINFOREST ALLIANCE CERTIFICATION IN COLOMBIA, 2006–2017**

Blair Cameron drafted this case study based on interviews conducted in Bogotá, Manizales, Bucaramanga, and San Gil, Colombia, in June 2017. The British Academy-Department for International Development Anti-Corruption Evidence (ACE) Program funded the development of this case study. Case published September 2017.

SYNOPSIS

In the early 2000s, the 500,000 smallholder farmers who collectively produced more than three-quarters of Colombia's coffee gave little thought to the impact of their activities on the environment, as they struggled to earn a living. Many carelessly used dangerous chemicals and dumped contaminated water into rivers. Aiming to protect biodiversity in coffee-growing regions of Latin America, the Global Environment Facility, an intergovernmental environmental fund, granted US\$12 million to a United Nations Development Programme project led by the Rainforest Alliance, a New York-based nongovernmental organization (NGO), to help farmers in Colombia and five other Latin American countries meet a certification standard designed to enforce good agricultural practices and protect the environment. Crucially, the funding also enabled the Rainforest Alliance to cultivate a global market for sustainably produced coffee by promoting the product to companies and consumers. By 2017, about 10,000 Colombian farms covering about 70,000 hectares had earned Rainforest Alliance certification, and about 5% of coffee production globally was Rainforest Alliance certified. Other NGOs and coffee companies had developed similar but less-demanding systems, and collectively, they covered more than one third of Colombia's coffee production. By comparison to other countries that produced agricultural commodities, that rate of participation was high, and the inclusion of smallholders, who were usually hard to organize, was distinctive. However, many farmers did not participate in the voluntary systems, and Colombia's water and forest resources remained under threat in some areas.



INTRODUCTION

“We always knew we had to make changes, but certification was an incentive to actually do it instead of putting it off for another day,” Vicente Rodríguez recalled in 2017. Rodríguez ran a 90-hectare coffee farm in Santander, Colombia, that had improved its housing for workers and built new processing and wastewater-treatment facilities in order to earn certification from the Rainforest Alliance. The farm, Hacienda La Laguna, was one of thousands in Colombia that had changed decades-old practices to meet new standards set by the Sustainable Agriculture Network (SAN), a global alliance of environmental nongovernmental organizations (NGOs) to which the Rainforest Alliance belonged.

Although Colombia had strict labor and environmental regulations in place, the government struggled to enforce the rules in poor, rural communities. Colombia’s coffee farmers, who in most cases owned just one or two hectares of land each, knew little about environmental management and many were unable or unwilling to change practices or invest in infrastructure that would help protect forests and waterways on or near their farms.

In the late 1990s, NGOs like Fairtrade International and the Rainforest Alliance had attempted to raise production standards and improve farmers’ livelihoods by introducing voluntary certification systems. Farms that met certain standards defined by the NGOs, and passed independent audits, could sell their produce with a special seal. Proponents maintained that demand for certified products would emerge and that participating farmers would receive higher prices to reward their efforts. Progress was slow, however. By the mid 2000s, several years after the first Colombian coffee farm earned Rainforest Alliance certification, only a handful more farmers had joined the system, and only a few buyers had shown interest in purchasing certified beans.

In 2006, the Global Environment Facility (GEF), an intergovernmental fund established in 1991 to finance projects that addressed major environmental issues, granted US\$12 million to a United Nations Development Programme (UNDP) project that aimed to expand Rainforest Alliance certification of coffee farms in Colombia and five other Latin American countries. Importantly, the GEF grant included funding for the Rainforest Alliance to work with importers in Europe, North America, and Japan to develop a market for certified coffee.

“The idea was to simultaneously boost the supply and demand for certified coffee,” said Leif Pedersen, who developed the UNDP project proposal and then led implementation of the project for the Rainforest Alliance. “We were optimistic that companies would show a preference for sustainably produced goods and that that would shift production standards industry wide.”

THE CHALLENGE

Coffee farmers had played an important role in Colombia's economy for decades. In the mid-twentieth century, coffee exports made up about 70% of the country's gross domestic product (GDP). Although coffee accounted for a much smaller percentage of the country's GDP by 2006, the crop was still an important part of the economy, and Colombian coffees were known around the world for being of high quality. That reputation stemmed largely from work by the National Federation of Coffee Growers (FNC), a nonprofit association formed in 1927 to support coffee farmers and market Colombian coffee internationally (see textbox 1).

Funded by a tax on coffee exports, the FNC had field staff who provided Colombia's coffee farmers with free technical assistance to improve their farms and livelihoods. The organization also had affiliated cooperatives in every coffee-growing region of the country. The cooperatives bought beans throughout the harvest season (which varied depending on the region) and guaranteed farmers the international market price at the time of sale. Private coffee traders competed with the FNC to buy highly valued coffee varieties.

Even with the support they received from the FNC, most Colombian coffee farms were small and had only basic infrastructure. The majority of farmers each owned less than two hectares, some of which they used to grow crops and keep animals for food. Few farmers had completed secondary school, and many were illiterate. Although some farms hired full-time

Textbox 1: The National Federation of Coffee Growers

The National Federation of Coffee Growers (or FNC, its Spanish acronym) was founded in 1927 as a nonprofit organization to represent the country's coffee farmers. Though not part of the Colombian government, the organization received public funding from an export tax on coffee. The organization also earned income from coffee sales and other commercial enterprises, such as Juan Valdez Café, which the organization launched in 2002 to compete domestically and globally with Starbucks and other coffeehouse chains.

The FNC, based in Bogotá, Colombia's capital, had satellite offices in almost all coffee-growing municipalities—more than 500—across the country. Agricultural extension agents based at those offices visited local farms at least once a year to provide support for farmers and their families and to help them improve their coffee production. Often, that support involved providing disease-resistant coffee crops or agrochemicals and other products at low or no cost.

Farmers could always sell their coffee to local cooperatives (which were independent but affiliated with the FNC) at the market price at the time of sale. The cooperatives also bought daily quotas of certified coffee beans at set prices above the market price for coffee. The amount and price premium for that coffee were based on market demand for different coffee varieties. Farmers and cooperatives were not obligated to sell to the FNC, and many chose to sell to private companies that sometimes paid higher prices or provided other benefits.

workers, most were family operations. During the harvest season, however, even small coffee farms hired day laborers to strip ripe coffee cherries from the bushes that covered the hillsides. Those workers, who traveled from region to region following the coffee harvest, were paid low wages—often less than what was required by law—and rarely had access to good housing and sanitation.

Most farmers grew coffee in a way that was less environmentally friendly than the traditional shade-grown method. In the early 1980s, when coffee varieties that could grow in direct sunlight became widespread, farmers began clearing forests to grow coffee in single-crop fields. In some regions, especially areas with cloudy climates, sun-grown coffee bushes were significantly more productive than shade-grown ones. However, single-crop fields could support far less biodiversity than shade-grown farms, where birds could easily nest in the treetops that towered above the coffee bushes on the forest floor. Further, sun-grown bushes usually required more fertilizer and pesticides than shade-grown ones did, and single-crop fields were more susceptible to soil erosion.

Coffee processing also contributed to environmental degradation. In some countries, particularly those that grew lower quality robusta varieties, coffee cherries were dried in the sun before being processed days later, but in Colombia and most other countries that produced higher quality arabica coffees, beans were separated from the cherry pulp on the day of harvest by way of a process called *wet milling*. Smallholder farmers in other countries that used the wet milling technique usually sent their cherries to centralized mills for the de-pulping process, but in Colombia, farmers used their own wet milling facilities. Wet milling required large quantities of fresh water and produced polluted wastewater that many farmers discharged into streams and rivers. “If you discharge the water from a mill directly into a stream, the stream gets very contaminated because of the acidity and the amount of sugars in the coffee wastewater,” said Michelle Deugd, global agriculture director at the Rainforest Alliance. “That affects biodiversity, and it affects people who drink the water downstream.”

To become Rainforest Alliance certified, farmers had to prove their farms were well managed and environmentally friendly by meeting dozens of criteria outlined in the SAN’s sustainable agriculture standard (see textbox 2). Farmers had to keep detailed records regarding their operations, use only SAN-approved chemicals on their crops, pay all workers fairly, and create a safe working environment—for example, by providing protective equipment for workers to use when operating machinery or applying agrochemicals. Wastewater treatment was especially challenging. In order to earn Rainforest Alliance certification, farmers had to reuse water and treat wastewater to reduce pollutants before discharging it into waterways.

Textbox 2: The SAN Standard

The SAN's Sustainable Agriculture Standard had 100 criteria divided into 10 principles:

- Social and environmental management system
- Ecosystem conservation
- Wildlife protection
- Water conservation
- Fair treatment and good working conditions for employees
- Occupational health and safety
- Community relations
- Integrated crop management
- Soil management and conservation
- Integrated waste management

To earn certification, farms had to comply with 14 critical criteria as well as at least 50% of the criteria under each principle and 80% of all criteria. The critical criteria mandated that:

- A chain-of-custody system is necessary to avoid the mixing of products from certified farms with products from noncertified farms.
- A farm must have an ecosystem conservation program.
- The integrity of natural ecosystems must be protected; destruction of or alterations to the ecosystem are prohibited.
- It is forbidden to hunt, gather, extract, or traffic wild animals.
- The discharge of untreated wastewater into bodies of water is prohibited.
- The depositing of solid substances into water channels is prohibited.
- A farm must not discriminate in work and hiring policies and procedures.
- A farm must pay legal or regional minimum wage or higher.
- The contracting of children younger than 15 years of age is prohibited.
- Forced labor is not permitted.
- The use of personal protective gear is required during the application of agrochemicals.
- Only permitted agrochemicals can be used on certified farms.
- Transgenic crops are prohibited.
- New agricultural production must be located on land suitable for that use.¹

Smallholder farmers who applied for certification in groups had to meet slightly different requirements. Similar to individually certified farms, smallholders had to meet 50% of the criteria under each principle, including all critical criteria, and the average compliance rate for noncritical criteria among all farmers in the group had to be higher than 80%. In addition, each group had to comply with 16 further criteria defined in SAN's group certification standard. For example, group managers had to have farmer training programs in place, a risk assessment system to identify and address criteria that smallholders found difficult to comply with, and an internal management system to organize and monitor all farmers in the group.²

¹ *Sustainable Agriculture Standard with Indicators*, Sustainable Agriculture Network, November 2005; www.rainforest-alliance.org/business/agriculture/documents/standards_indicators_2005.pdf

² Group Certification Standard, Sustainable Agriculture Network, March 2011.

The standard also encouraged farmers to grow their coffee by using the traditional shade-grown method. In regions that had once been forested, farmers had to preserve at least 70 trees and at least 12 different native species of trees per hectare and could not earn certification without having a plan to grow 100% of their coffee in the shade within five years. In regions that originally had types of vegetation other than forest, such as savanna or shrubland, farmers instead had to dedicate 30% of their property to conserving or restoring that natural vegetation.¹ To increase the number of certified farms, the Rainforest Alliance had to help farmers increase shade-grown production and restore natural vegetation on their property.

After meeting those requirements, farmers had to hire SAN-approved auditors to inspect their farms in order to earn Rainforest Alliance certification. The SAN also required annual follow-up audits to ensure continued compliance.

Outside assistance and monetary incentives were crucial because coffee growers faced not only the personal challenge of changing their longtime ways of doing things but also the financial and technological challenges of improving their systems and infrastructure.

The Rainforest Alliance hoped to convince coffee companies to pay farmers a premium for coffee that had been grown according to the SAN standard. As profit-making enterprises, those companies were unlikely to do that unless a vibrant consumer market existed for the certified product. At the time, most major coffee traders bought beans at the cheapest price possible, paying little attention to conditions on farms. Only a handful of companies sold certified coffee because the market was a small niche of socially and environmentally conscious consumers.

Expanding the market for certified coffee was critical for both the Rainforest Alliance and smallholder coffee growers, who at the time were desperate to earn better prices for their coffee beans. After the 1989 collapse of the International Coffee Agreement, which had controlled coffee prices and production for decades, and a rapid increase in production of lower-quality robusta coffee in Brazil and Vietnam throughout the 1990s, coffee prices plunged, and many Colombian farmers, who grew higher-quality arabica varieties, were unable to cover their costs.

If the Rainforest Alliance project could succeed in building the market for certified coffee and in convincing coffee traders to take a greater interest in the farms their coffee came from, both the environment and the farmers would benefit.

FRAMING A RESPONSE

Pedersen, who had worked for the United Nations Development Programme before moving to the Rainforest Alliance specifically to implement the GEF-funded project, said it was essential to focus equally on both ends of the supply chain. A successful voluntary certification system

required both a reliable supply of the certified product and a steady demand for it. To that end, Pedersen allocated the GEF grant more or less evenly between teams in Colombia and five other Latin American countries that worked with coffee producers, on one hand, and Rainforest Alliance staff who focused on stimulating demand for certified coffee in developed countries that imported Latin American coffee, on the other.

Environmental NGOs in Brazil, Colombia, El Salvador, Guatemala, Honduras, and Peru—the six countries chosen for the project—were in charge of increasing the number of certified farms. Those NGOs were part of the SAN, which at the time consisted of the Rainforest Alliance and nine other environmental NGOs, each based in a different country.

Fundación Natura was the local SAN-member NGO in Colombia. The organization had been established in 1984 to conserve Colombia's biodiversity and address other environmental issues. Since its founding, Fundación Natura had supported the development of protected areas and implemented conservation projects. The NGO began promoting the adoption of Rainforest Alliance certification in the 1990s, but lacked the capacity to do much more than publicize the standards and audit any farmers interested in becoming certified. "In the first years of Rainforest Alliance certification, Fundación Natura focused mostly on the audit process rather than how farmers could comply with the standard's criteria," said Oscar Nausa, an auditor at the NGO who had visited some of the farms that earned Rainforest Alliance certification before the GEF project began. "We simply presented the standard to farmers and coffee exporters and let them interpret it for themselves."

Through the GEF project, Pedersen wanted to boost capacity within Fundación Natura and other partner NGOs. Those NGOs, he said, could connect better with farmers in coffee-producing countries than an international organization with no local ties. To do that, however, Fundación Natura and the other producer-country NGOs had to shift their focus. Rather than just auditing farms, they had to begin spreading the word about Rainforest Alliance certification, teach people how to comply with the standard, and support the implementation process. In Colombia, that meant the organization had to collaborate with the FNC and other coffee traders that had direct relationships with farmers.

In some countries, organizing small-scale farmers was difficult because of geographic dispersion or because smallholders did not trust outsiders. In Colombia, the FNC's strong structure and satellite offices in municipalities across the country eased the process. Further, the FNC had more than 1,000 field staff who already had relationships with smallholder farmers. Fundación Natura could leverage those relationships to spread knowledge and understanding of SAN criteria and Rainforest Alliance certification.

The SAN created a group standard to ease certification for smallholders, who faced substantial costs for mandatory annual audits. The new standard

allowed farmers to apply in groups, and required independent audits for only a sample of each group's farms each year. As well as that independent audit, groups had to have internal inspectors who checked every farm annually for compliance. Because FNC field staff usually visited each farm in the area at least once a year, they could undertake the required inspections.

Given the FNC's important role in Colombia's coffee sector, establishing a strong relationship with the organization was essential for the Fundación Natura team. Fortunately, the FNC was open to the idea of certification. At the time, global coffee prices were in a slump and farmers were struggling, so the FNC was focusing much of its energies on helping farmers earn higher prices for their coffee through a new "specialty coffee" program. "The federation had been in a very deep crisis due to the depressed coffee prices," said Ximena Rueda, who became the FNC's director of strategic marketing shortly after the GEF project began. "The specialty coffees strategy was beginning to take off, but it was still very small."

The specialty coffees program had initially focused on selling distinctive coffee varieties related to quality or other attributes, or coffee that had been certified as Organic or Fairtrade.² Rainforest Alliance certification was another way for the FNC to achieve its goals.

GETTING DOWN TO WORK

After the GEF approved the proposal, Pedersen and his team set to work building capacity within the Rainforest Alliance, Fundación Natura, and partner NGOs that were also members of the SAN in the other five countries involved in the project. The Rainforest Alliance hired more marketing and communication staff to promote coffee certification and highlight the work the organization was engaged in. Fundación Natura was responsible for spreading the word about Rainforest Alliance certification in Colombia and for providing coffee farmers with the tools and knowledge they needed to meet the SAN standard.

Training the trainers

To scale up quickly, Pedersen wanted to train people who had experience working with farmers. "We didn't have enough capacity to train each individual farmer," he said. "So instead, we wanted to train people who would then go on to train the farmers. That was the only way we could get to the hundreds of thousands of coffee farmers we wanted to reach across the six countries."

In many cases, staff members who had been auditors of the SAN standard, such as Nausa at Fundación Natura, took on new roles as trainers. In 2007, Nausa and other Fundación Natura staff began traveling to coffee-growing regions around Colombia to hold three-day workshops—primarily with FNC extension staff—to teach them about the SAN standard and how they could help farmers become Rainforest Alliance certified.

After Fundación Natura initially targeted FNC staff, other coffee exporters soon became interested, so the NGO opened up the workshops to private companies. “We began to diversify and work with other exporters while also continuing to work with the federation,” Nausa said.

Initial training sessions took place in the departments where Fundación Natura and the FNC staff believed there was the most potential for Rainforest Alliance certification to reach a lot of farmers. (In Colombia, a department is an administrative division similar to a state or province.) “We prioritized certain areas for different reasons,” said Nausa. “For example, because there was a lot of good-quality coffee or because there was a lot of interest from farmers in a particular region.”

Santander department looked especially promising as a starting point. In Santander, almost all coffee was shade-grown because of climatic conditions, and organic certification—which required that farmers not use chemicals in coffee production—was already widespread. Some of those farms had already earned Rainforest Alliance certification.

But before the GEF project began, farmers and extension agents had received little guidance on how to meet the standard. Not surprisingly, Nausa and his team found many misconceptions. “We had to make people realize that certification was less complicated and less costly than they thought,” said Nausa.

Santander already had several Rainforest Alliance–certified farms, but many farmers there and in other departments “had done things that were just not strategic,” said Nausa. “They had spent money on fancy signs, first-aid kits, and fire extinguishers instead of investing in things related to agricultural and environmental issues.”

Nausa worked to help farmers understand how they could meet difficult criteria in cheaper and simpler ways. “We showed the extension staff many ways to implement the standard at low cost,” said Nausa. “The farmers still had to have signs, but they did not need fancy acrylic ones; they could make their own signs by using materials they already had. And the first-aid kit did not have to be in a 30-by-30 box with a Red Cross logo on top; they could instead keep first-aid supplies in a little bag.” By reducing the cost to comply with those criteria, certification became more affordable for smallholders.

Nausa and his team developed a manual for training farmers in the SAN standard and issued one to each extension agent who attended the workshops. The manual provided templates for the agents to follow in order to ensure farmers complied with all of the critical, or mandatory, criteria and with enough of the noncritical criteria to gain certification. Farmers were required to comply with 80% of the noncritical criteria in the SAN standard in order to pass a certification audit. The manual was vital for helping extension staff understand what was required. “You can have all the financial resources and all the market demand, but if you can’t make the standard understandable for those working on the farms, certification won’t go

anywhere,” Nausa said.

In the space of one year, Fundación Natura staff visited dozens of municipalities across Colombia. In total, they trained more than 500 extension agents, according to Nausa. The NGO also provided ongoing support for attendees. “After the three-day training finished, extension agents could call our team and ask any questions they had,” he said.

A few months after the training sessions, Nausa or one of his colleagues returned to each region to teach agents how to conduct internal audits. The SAN group standard required that group managers conduct such audits every year. Fundación Natura taught the agents how to use checklists when inspecting farms and how to keep track of compliance using Microsoft Excel spreadsheets.

Training the farmers

After attending Fundación Natura’s workshops, FNC extension agents got to work with farmers in their areas. FNC staff already knew the farmers in their regions well. They visited their properties regularly to provide advice and assistance and could easily identify the farmers they thought were best prepared for Rainforest Alliance certification. Agents targeted farmers who were already complying with the SAN standard’s critical criteria—for example, farmers who did not discharge untreated wastewater into streams and those who grew coffee in the shade and had many different native tree species on their properties.

The close relationship between farmers and extension agents was crucial in securing farmers’ participation. “The extension service has a good reputation and good credibility with farmers,” said Rodrigo Calderón, a former extension agent who in 2006 took charge of the FNC’s sustainability and certification initiatives. “So the farmers listened when the extension agents suggested new ideas.”

The FNC staff had the most success working with farmers who were open to implementing new technology and trying new production practices, as well as farmers who showed an interest in environmental sustainability.

Some farmers opposed the idea of certification because compliance costs seemed high, while others were open to the idea because of the potential economic benefits. “It was an attractive proposal,” Calderón said. “The farmers had the possibility of earning better prices and having more-organized farms. The FNC paid for the audit costs and helped farmers out with some of the more expensive improvements. The only costs the farmers had were the smaller improvements they had to make to their farms.”

Still, most farmers had to invest considerable time as well as some of their own money to earn certification. If they lacked required infrastructure, such as chemical storage sheds, they had to build them. Farmers also had to keep detailed records of farm operations—a time-consuming activity that few had ever done before.

Because of those costs, and uncertainty about the financial benefits of certification, it was difficult for FNC agents to get a large number of farmers on board. “It is very difficult to convince farmers to get certified,” said Johanna Villavicencio, an FNC extension agent based in San Gil, Santander. “They are looking for a guaranteed financial return, and we have to change that mind-set. Some, however, are more willing because they are convinced of the importance of caring for the environment.”

Staff at the FNC’s regional offices organized farmers so they could apply together under the SAN’s group certification standard, which lowered the cost by spreading audit fees among many members. Initially, they set up small groups of 10 to 15 farmers in order to ensure effective management. “It was a learning process, so we started with small groups,” Calderón said. “We didn’t think we could have big groups because the risk of all of them losing certification was too high. If one farmer didn’t comply, the whole group could lose certification.”

Jorge Rave, coordinator of the specialty coffees program in Santander, said extension staff visited all group members and created an individual action plan for each farmer. Extension agents followed up a month or two later—either in person or by phone—to determine whether the farmers had followed their plans. If several farmers were struggling with particular criteria, the agents would organize group meetings to discuss solutions or would accompany group members on visits to other farms that had already met the criteria in question.

Ensuring compliance

When farmers were ready, teams from Fundación Natura visited the groups for full certification audits. The auditors chose a random sample of group members and thoroughly checked their farms for compliance with the SAN standard. Using a common sampling technique recommended by the SAN, the auditors took the square root of the total number of farms in the group and audited that number of properties. For instance, if a group had nine farms, the auditors would randomly select three for inspection.

If the farms complied with all of the critical criteria in the SAN standard as well as 80% of the noncritical criteria, the group received certification. If one or more farms in a group failed the initial review, the auditor gave the FNC agent and the farmers six weeks to make any necessary changes before a re-audit.

In Colombia, small farmers found it difficult to comply with some of the SAN criteria, especially those that required detailed records of farm operations, including the use of chemicals, expenses and revenue, and other data. “There was no culture of record keeping, and some farmers were illiterate,” said Henry Parra, head of the extension department at the FNC’s Santander office. The solution often depended on individual circumstances. In some cases, farmers whose children had attended secondary school could

keep basic records for them. In others, FNC staffers filled out forms and kept records based on conversations with each farmer.

Larger farms often encountered different problems. For example, Rodríguez said that Hacienda La Laguna had to replace dormitories used by workers to stay in during the harvest season because the quarters were cramped and damp and lacked basic sanitation facilities. The hacienda owner, who lived in the nearby city of Bucaramanga, financed the construction of new dormitories.

Claudia Cortés, who began as an auditor with Fundación Natura in 2006, said the most common infractions she came across were the use of prohibited chemicals, lack of chemical storage facilities, workers not using protective equipment when applying pesticides, the discharge of contaminated water, and the hiring of workers younger than 18 years old. Chemical usage and storage improved over time, she said, as farmers received more training and support from the administrators of the farmer groups.

Extension agents visited each farm in the certified groups at least once each year to conduct internal inspections. During such inspections, the agents checked that farmers continued to comply with the SAN standard and offered advice on how to improve operations and meet additional noncritical criteria.

Each year, independent auditors conducted an audit of a sample of farmers in each group. Prior to 2009, the audits were conducted by Fundación Natura. That year, Fundación Natura created a separate audit company, NaturaCert, to eliminate the appearance of any conflict of interest between the NGO, which supported and promoted certification, and the audit company, which conducted certification audits.

Building a market for certified coffee

While the producer country teams worked to build the supply of certified coffee, Rainforest Alliance staff—based mostly in North America and Europe—tried to persuade the world’s largest coffee brands to begin buying the product. In 2007, when the GEF project launched, certified coffee was a relatively novel concept. Some coffee companies had begun selling certified coffee to consumers who were willing to pay extra for products that supported the environment or poor communities. But building consistent world demand for sustainably produced coffee required a huge marketing push.

The Rainforest Alliance hired full-time staff members in the United States and the Netherlands, and part-time staffers in other countries, to meet with coffee sellers, educate them about Rainforest Alliance certification, and suggest marketing strategies. The organization also hired a consultant based in Belgium to try to influence public procurement policies in European governments. “It was very atypical work for an NGO,” said Pedersen. “We hired commercially savvy people to explain to public relations and

commercial staff how to market certified coffee. They helped with inputs into marketing campaigns and even assisted with product launches in Europe, the US, Canada, and Japan.”

Educating marketers was often challenging. Even though brand executives had built their careers in the coffee industry, many knew little about how coffee was produced. “The brand people typically had little experience with coffee growers,” said Pedersen. “Many of them had never been to a farm, and they knew nothing about sustainability or environmental problems; they were marketers.” Coffee marketers traditionally differentiated their products on the basis of quality, and Rainforest Alliance staff had to teach them how to market sustainable coffee in a different way.

Working with Rainforest Alliance staff, marketers at several multinational companies developed campaigns to promote the certified coffee. “We had a very good communications department,” Pedersen recalled. “They would speak to the coffee brand people to make sure they used the right images, said the right things, and made it sexy.”

Alex Morgan, who worked for the Rainforest Alliance to build the sustainable coffee market in the United States, attended coffee industry events around the world to spread the word about Rainforest Alliance–certified coffee and talk with prospective clients. He and his colleagues cold-called coffee companies to gauge interest and responded to companies that reached out to the NGO independently. Morgan said he tailored his approach based on each company’s interests. “In some cases, companies are very interested in the environmental message, and in other cases, companies like that the standard is broad and comprehensive, covering environmental, social, and labor issues,” he said.

Morgan and other Rainforest Alliance staff quickly secured commitments from several of the world’s major coffee brands to buy large quantities of Rainforest Alliance–certified coffee. “We got companies like Nespresso, [Minnesota-based] Caribou, and Costa Coffee in Europe,” he said. “There was a whole slew of them, and then we got Dunkin’ Brands [the United States–based company that owned Dunkin’ Donuts] and McDonald’s [the world’s largest restaurant chain] on board globally.”

Pedersen also allocated a portion of the project budget to promote certified coffee in the media. The Rainforest Alliance invited North American and European writers to farms in Colombia and the other countries involved in the project. “We would show the journalists what a difference it made if a company sourced sustainability-produced coffee,” Pedersen said. “Their stories helped create an awareness among consumers.”

Working with non-FNC coffee traders

Until 2008, the FNC had been the only coffee trader that worked directly with farmers to help them gain certification. But as the Rainforest Alliance’s marketing and outreach to coffee companies in developed

countries gained traction, many companies began requesting Rainforest Alliance–certified coffee from other trader-exporters that competed with the FNC to buy coffee from farmers and cooperatives across the country. As that demand for certified coffee grew, non-FNC traders became interested in working directly with farmers. “The traders gradually figured out where demand was heading and that companies would need more certified coffee than was available,” Pedersen said. “So they had to set up support structures for farmers to get certified.”

One of the traders that began to take on the new role was SKN Caribecafé, the Colombian subsidiary of Germany’s Neumann Kaffee Gruppe, the world’s largest coffee trader. “The market began demanding coffee with certain characteristics, such as certain quality beans or certain certifications, and some companies wanted us to trace the coffee back to where it came from,” said Jorge Gómez, who was hired in 2008 as SKN Caribecafé’s first sustainability director. At the time, the company had no contact with coffee farmers. “We just bought coffee from third parties that knew the farmers,” Gómez said. “We didn’t know which farms the coffee came from. . . . At the time, no one had field staff except for the FNC.”

SKN Caribecafé hired its first extension agent in 2008, but progress—at least initially—was very slow. “The farmers had been doing things the same way for many years,” Gómez said. “Changing that culture is difficult. We can have all the literature in the world that explains the benefits. It doesn’t matter. If the farmers don’t see it in practice, they don’t believe it. You need local examples to generate change.”

One of the company’s clients was Nespresso, a subsidiary of Nestlé that marketed single-use coffee capsules globally. Nespresso had developed its own sustainability program, known as AAA, in collaboration with the Rainforest Alliance and Fundación Natura (see textbox 3). SKN Caribecafé first focused on organizing groups of farmers to participate in the AAA program but soon expanded to other certification systems so that it could fulfill its clients’ demand for certified coffees.

Most of SKN Caribecafé’s clients were more interested in certification systems other than the Rainforest Alliance. “We had some requests for Rainforest Alliance–certified coffee, but it was not large volumes” said Gómez. “Still, we wanted to be able to offer it...[even though] it was the most complicated and costly [certification] to implement.”

Over time, the company stepped up its efforts to organize farmers into groups, train them, and certify them. By 2017, the company had 25 extension agents working in five departments, according to Gómez; and about 10% of the coffee the company exported was sold as certified under Rainforest Alliance or other certification systems—mostly Nespresso’s AAA program and the C.A.F.E. (Coffee and Farmer Equity) Practices program of United States–based coffeehouse chain Starbucks.

Textbox 3: Nespresso's AAA Sustainable Quality Program

In 2002, Nespresso, part of multinational food and drink company Nestlé, approached Fundación Natura and the Rainforest Alliance for help developing its own system to support farmers and improve their farms' quality, productivity, and sustainability.

Nespresso sold coffee capsules that could be inserted into a specialized machine to produce espresso. Santiago Arango, who became Nespresso's sustainability manager in 2007 after previously working for Fundación Natura, said the idea behind the system was to secure the company's supply of high-quality coffee for the future. If farmers grew coffee in a sustainable way, he said, the company would have a reliable long-term source of the coffee its customers wanted.

The sustainability aspect of the program was based on the Sustainable Agriculture Network (SAN) standard. There were no requirements to enter the program, but farmers had to commit to meeting the program's core criteria within three years. Nespresso provided financial and technical assistance to help them do so. The company aimed to have 80% of its coffee come from AAA-verified suppliers by 2013 and to have as many as possible certified by the Rainforest Alliance.

Beginning in 2006, Nespresso asked the National Federation of Coffee Growers (FNC) and other coffee exporters to organize farms into "clusters"—groups of farmers who produced high-quality coffee with similar characteristics. Nespresso promised those farmers better prices for participating in the AAA program and for complying with the program's requirements. To ensure that farmers received the necessary support, Nespresso paid the salaries of extension staff who worked at the FNC and private companies. It also paid external auditors to check farmers for compliance with AAA criteria. Top-performing farmers were encouraged to get Rainforest Alliance-certified. According to Arango, the company paid farmers that were both AAA-verified and Rainforest Alliance-certified a premium of US\$0.05 per pound. Nespresso paid for the first certification audit, but farmer groups (usually managed by the FNC or another exporter) were responsible for paying audit fees after the first year.

By 2017, all of Nespresso's suppliers in Colombia participated in the AAA program. Arango said 80% of the company's coffee was AAA-verified and about 50% was Rainforest Alliance-certified. Despite being one of the largest buyers of Rainforest Alliance-certified coffee in the world, Nespresso chose to market its coffee on quality characteristics, and as of early 2017, did not market its coffee capsules using the Rainforest Alliance-certified seal.

Tracking certified coffee

Ensuring the integrity of the supply chain was critical to the success of the certification system. The SAN required that certified coffee be kept separate from noncertified coffee from the moment the coffee cherry was picked from the bush through to the point of export.

The SAN also required that dry-processing facilities, where husks and other organic matter were removed from the beans, be audited to the SAN chain-of-custody standard, which required that facilities have systems in place to keep certified coffee separate from noncertified coffee and to track it through to where the coffee was exported.

The FNC used an internal database system to track all coffee purchases across the country, and other exporters had similar systems in place. Farmers

sold coffee to FNC-affiliated cooperatives, which had warehouses and processing facilities in almost every coffee-growing municipality in the country. The cooperatives listed the buying price—which was updated every few hours based on the price of coffee on the New York market—and any premiums available for Rainforest Alliance and other coffee certifications.

Each member farmer had an identification card issued by the FNC. The FNC database included information on each farm, such as expected coffee production and records of any previous coffee sales. Using that information, the cooperatives could ensure that farmers sold only the quantity of beans they produced on their certified farms. “There are strict sanctions against anyone who allows uncertified coffee to mix with certified coffee,” the FNC’s Calderón stressed. “Following the internal control system rules, they would get kicked out of the group.”

Companies at each step in the supply chain kept track of the certified coffee they bought and sold by recording transaction certificates and reporting them to the Rainforest Alliance. “A transaction certificate could be 5 bags of Costa Rican microlot coffee from a particular farmer, or it could be 10 containers of Colombian coffee from a certain cooperative,” said Morgan of the Rainforest Alliance. “Those transaction certificates are entered in our online portal, and we record all transactions—from producer to exporter, to importer, to roaster.”

NaturaCert staff audited the tracking systems annually to ensure there were no discrepancies between certified coffee production and sales.

OVERCOMING OBSTACLES

In the early years of coffee certification in Colombia, farmers, auditors, the Rainforest Alliance, and the FNC had disagreements on several issues with regard to standard criteria and the certification process. Aligning the SAN agriculture standard, the SAN group standard, the ways farmers implemented the two standards, and how auditors interpreted them posed a significant obstacle to success.

One of the biggest difficulties was the standard’s criterion regarding shade-grown coffee. “The Rainforest Alliance requirements about having dense tree coverage with 12 different species was very difficult to comply with,” Calderón said. “That condition, applied in a generalized way, just did not work in all parts of the country.” In areas where sun-grown coffee was the norm, farmers could earn certification only if they committed to switch to shade-grown coffee over a five-year period, or, in areas that weren’t originally forested, if they set aside 30% of their property for conservation of natural vegetation. In some cases, farmers would have had to reduce their productive area to meet the requirement. Most farmers were unwilling to do that, so the criterion effectively excluded many farms in regions where sun-grown coffee was the norm.

In 2012, the SAN issued interpretation guidelines for Colombia that

allowed farmers and auditors to take into account climatic conditions and scientific studies on the optimal levels of shade for growing coffee in different regions. Auditors at NaturaCert began allowing farms that cultivated coffee bushes without full tree cover to earn certification. Further, farms could include productive crops, such as plantain and banana trees, as part of the 12 species required per hectare. The new guidelines opened up the possibility of Rainforest Alliance certification to hundreds of thousands more farmers, because more than half of Colombian coffee was not shade grown.

Complying with child labor rules was a stickier problem. Although the international SAN standard allowed farm laborers to be as young as 15 in some circumstances, Colombia prohibited the employment of anyone younger than 18 for agriculture work. The government rarely—if ever—enforced that law, but the auditors were not permitted to certify any farm that failed to comply with Colombian law. The age requirement raised complaints from farmers and the federation, who said it was unfair in light of the realities of rural Colombia. “Is it fair that a 16-year-old, who might already have a wife and child, can’t work on a certified farm?” asked Parra from the FNC’s Santander office. “In other countries, like Peru, that is allowed.” Auditors strictly enforced the rule, and several otherwise eligible farms were denied certification.

In 2012, the SAN issued a directive regarding child labor that aimed to ease tensions between farmers and auditors. The directive allowed 15- to 17-year-olds to work in special cases—for example, if they were heads of households, if they had been internally displaced due to conflict, if they did not have access to educational opportunities, or if they worked only during school vacations.³ However, Cortés, a long-time auditor at Fundación Natura and then NaturaCert, said a 2013 law change in Colombia strictly prohibited anyone under 18 from working in coffee production. “Since the law change, any time we have found a farm with underage workers it has been evaluated as a noncompliance with the SAN child labor criteria, because the government has not approved any exceptions,” she said.

Another conflict that limited the uptake of certification, at least initially, was how auditors went about their inspections. “In the beginning, the audits were a little like police inspections because we had been trained to search for and find any cases of noncompliance,” said Cortés. “As a result, relations with farmers were often difficult, and in some cases the farmers feared the auditors.”

A change in leadership, extensive auditor trainings, and improvement in communication between the auditors and the SAN helped shift attitudes and improve relations with farmers. “The auditor has to be like a referee in football or in any other sport—calm and measured—and has to explain clearly to the players why they aren’t compliant,” said Sandra Restrepo, who was hired as director of NaturaCert in 2010. “It is very important that the farmer not feel persecuted or judged because of not complying with this or

that criterion.”

Restrepo built a new team of auditors, training them to take a friendlier approach with farmers. “Auditors have to have a positive attitude,” said Restrepo. “They have to be friendly to farmers and help and encourage them to improve.” Cortés said there was a huge shift in the auditors’ approach after going through the extra trainings instituted under Restrepo’s leadership and that relations with farmers improved significantly.

Part of the problem had been poor communication between the Costa Rica–based SAN, which defined the criteria, and the Colombia-based auditors who interpreted those criteria. “In the beginning, the criteria weren’t as clearly defined,” said Oliver Bach, policy and standards director at the SAN. “As a result, local audit teams would sometimes interpret criteria in different ways than we intended.”

Over time, as the SAN became more established as an organization and Rainforest Alliance certification became more widespread, the SAN became able to increase its staffing numbers and better oversee the auditors in Colombia. “Now we have much more capacity and a much better training program for auditors,” said Bach. “Communication is much more dynamic, and NaturaCert staff can ask us any questions they like. The result has been a huge improvement in terms of the feedback we have received about audits.”

A third obstacle to expanding certification was the high cost of external audit fees for the FNC and other traders. Initially, the federation had created small groups of 10 to 15 farmers for certification. That way, extension agents could keep close watch on compliance issues, and farmers in each group would often check up on each other. “When groups were small, other farmers would often accompany us when we went to audit the sample,” said Cortés. “It generated huge pressure on farmers to comply.” But as more and more groups of farmers joined the program, the cost of paying external auditors grew. “It got too expensive,” said Calderón of the FNC. “The smaller groups just weren’t viable long-term.”

To counter the problem, regional FNC offices increased the size of groups. Small groups of 10 to 15 farms combined into much larger groups—sometimes numbering several hundred farms and encompassing a whole department. In Santander department, there were 18 groups comprising 1,040 Rainforest Alliance–certified farmers in 2010. By 2016, FNC staff had consolidated those farmers into three groups, and the number of certified farmers had increased slightly, to 1,078.⁴ “The larger the group, the more cost-effective it is for us,” said Parra.

The larger group sizes reduced audit costs, but monitoring compliance within a group became more difficult, and some groups ended up losing their certification. Auditors checked a small sample of farmers in each group annually, and if one of the farms was not in compliance, the whole group lost its certification.

ASSESSING RESULTS

In 2016, Rainforest Alliance–certified farms in Colombia produced 66,000 metric tons of certified coffee—more than five times the 13,000 metric tons produced in 2006. The certified farms covered about 70,000 hectares and had about 35,000 hectares of coffee crops, according to NaturaCert director Restrepo. In total, about 10,000 farms had earned certification, including both smallholders and larger farms. “It is a mix of small farms of around one hectare and certified large farms of up to 400 hectares—which of course is not your average Colombian coffee farm,” said Restrepo. “Most Rainforest Alliance–certified farms have less than five hectares.”

A 2014 report by the International Institute for Sustainable Development, an independent research NGO, estimated that about 35% of the total area of coffee production worldwide was certified by at least one of five voluntary sustainability standards (Rainforest Alliance, Fairtrade International, 4C, Organic, and UTZ, which in mid-2017 announced plans to merge with the Rainforest Alliance to create a joint system). Despite accounting for only 7% of global coffee production, Colombia exported more 4C-compliant coffee than any other country, more Fairtrade-certified coffee than any country except Brazil (the world’s largest producer), and more Rainforest Alliance-certified coffee than any country except Brazil and Ethiopia.⁵

Studies commissioned by the Rainforest Alliance and carried out by FNC-affiliated research institute Cenicafé found that Rainforest Alliance–certified farms in Santander were more profitable per hectare than noncertified farms and that certified farms generally supported a greater variety of invertebrates, a key biodiversity indicator, than comparable noncertified farms. Further, certified farmers were more likely to plant trees on their farms than noncertified farmers. In some areas, such as Cundinamarca department, streams on certified farms were less polluted than those on noncertified farms. In other areas, however, researchers found no significant difference in water quality.⁶

Nausa said the number of Rainforest Alliance–certified farms in Colombia didn’t necessarily reflect the full number that complied with the SAN standard. “Some farmers dropped out of the certification because they weren’t getting enough financial benefit, or they switched to one of the other certification programs,” he said. “Those farmers may no longer be Rainforest Alliance certified, but they continue following the SAN criteria. . . . They don’t abandon the good agricultural practices they learned.”

At the global level, more than 200,000 farms covering 775,000 hectares worldwide had earned Rainforest Alliance certification by 2017. Collectively, Rainforest Alliance–certified farms produced about 450,000 metric tons, or about 5% of the total global production, of certified coffee each year.⁷

When the GEF project launched, Pedersen wanted to increase

Rainforest Alliance certification to 10% of global coffee production—from less than 1%—within seven years.⁸ Although the project succeeded in boosting global demand for certified coffee and increasing the number of certified farms in Colombia and the other five producer countries involved, it fell short of its original goals. “The idea was that the market could drive a whole change process throughout the supply chain and back to the farmers,” said Pedersen, who in 2017 worked as a senior adviser in the United Nations Development Programme’s Green Commodities Program. “Looking back, that was very optimistic. Progress was much slower than we thought. It was much more expensive and required much more involvement from the coffee companies than expected. Still, with a relatively limited team in each country, we managed to make a huge impact.”

After 2013, growth in the supply of certified coffee slowed both in Colombia and in other Latin American countries. Proponents expressed disappointment that the initiative lost steam after GEF funding dried up. “Part of the reason was that there was no more donor money for certification,” Nausa said. “International and Colombian donors became more interested in spending their money on other projects . . . We could have kept increasing, but at a slower pace, if there had been more funding from donors.”

Another reason for the lower-than-expected take-up by farmers was the high cost of earning certification. In 2010, the Rainforest Alliance conducted a study to measure the cost of implementing the changes necessary to become certified in relation to the income farmers received. The study found it was usually less cost-effective for Colombian farmers to get Rainforest Alliance certified than it was for farmers from other countries involved in the GEF project. The main reason was the cost of improving wet-milling facilities to reduce water wastage and contamination.⁹

Even if they were interested in certification, some farmers simply could not afford to make the necessary improvements to their farms. Floralba Vesga, who had a two-hectare shade-grown-coffee farm in Santander that was not Rainforest Alliance certified, said the improved wet-milling technology required by the SAN standard was too expensive. “We have debts we need to pay, and I have a child studying engineering at university,” she said. Vesga, who had never attended secondary school, said she prioritized paying her debts and her child’s university fees over spending money on the farm. “I’ve thought about certification, but I can’t do it until I pay off my debts,” she said.

Low and inconsistent price premiums for Rainforest Alliance coffee limited farmer interest in becoming certified. Farmers could sometimes get an equal or better premium through having a different certification, or participating in a company-led program such as Starbucks C.A.F.E. Practices or the Nespresso AAA program. Many farmers chose to participate in programs that were less rigorous than the Rainforest Alliance certification

program, such as the 4C Association's program, which was launched as a verification system in 2008 by German development organization GIZ and the German coffee association. Quickly becoming the most common standard in Colombia, 4C had fewer requirements than the SAN standard and did not require annual audits, but in some cases it still earned farmers a comparable price premium.

Calderón of the FNC said he doubted that Rainforest Alliance certification would expand further in Colombia because of the high costs—in both time and money—that were necessary to get farmers on board. Calderón said a small percentage of farmers were quick to participate in initiatives like Rainforest Alliance certification because they already met many of the criteria, and others were willing to join after seeing the first movers do so. However, he said, about half of all farmers declined to join the program because of the time and effort required to upgrade their operations. “It's not easy to convince those farmers and help them comply,” he said. “Rainforest Alliance certification helped us a lot to work on sustainability issues in an integrated way. But looking at current projections I don't think it will grow in the future. We can maintain the certified farmers we have, but we need better prices for certified coffee so they can continue making improvements on their farms. The goal now is to train farmers in sustainability issues and best agricultural practices, and leave certification only for when it makes business sense for farmers and their families.”

Rave of the FNC said that in Santander, the number of certified farmers had remained more or less constant since 2010. “We might have five farmers drop out, but then another five farmers will join. If our agents see any farms that are compliant or almost compliant with the SAN criteria, they will suggest to those farmers that they consider certification.”

Despite falling short of expectations in terms of the number of farms certified, the Rainforest Alliance had a wider impact throughout the coffee industry than the numbers suggested, according to Pedersen. “The SAN created a very comprehensive set of good practices that was codified in the standard,” he said. “The SAN standard and the other sustainability standards have helped create understanding and awareness of common problems on coffee farms, and generated some solutions to those problems. Many farmers have adopted changes on their farms, and now the industry is pushing for it, which is a great thing. There's still a lot of work that remains to be done to help farmers adopt better practices, but the ball is in motion.”

In 2017, however, there were still hundreds of thousands of farmers in Colombia who continued using outdated practices that damaged the environment. “Exporters helped the farmers who could get certified with the least effort and cost,” Nausa said. “They were not interested in working with the poorest farmers who had the most basic operations because it would cost a lot more to help those farmers reach the minimum requirements for certification. Those farmers are excluded by market-based certification

systems. If NGOs worked with those farmers, there wouldn't be a big increase in the quantity of certified coffee available, but it would have a much bigger social and environmental impact.”

REFLECTIONS

Commitment from the National Federation of Coffee Growers (FNC) and other exporters helped facilitate access to certification for thousands of smallholder farmers across Colombia. However, high compliance costs and inconsistent demand for certified coffee limited continued growth of the certified coffee market, and by 2017, it was clear that new solutions were necessary.

Strict labor and environmental laws and the high cost of bringing wet-milling facilities in line with SAN requirements limited the expansion of Rainforest Alliance certification for smallholders in Colombia. Less-restrictive laws and the existence of central milling facilities meant farmers in other countries could usually comply with the SAN standard more easily. “In Peru . . . local legislation is not as strict as in Colombia,” said Michelle Deugd of the Rainforest Alliance. “And if you look at countries in Central America, all the milling is done at central mills.” Central milling enabled individual farmers to avoid the cost of improving their on-site wet-milling facilities. The Rainforest Alliance had tried to convince Colombian farmers to try central milling, but farmers preferred to stay with traditional practices and retain control of the production process.

Despite the high compliance costs, Rainforest Alliance certification became more widespread in Colombia than in some other coffee-producing countries because of the influence and capacity of the FNC. “In Colombia, it was a lot easier for us to reach farmers because of the federation,” said Leif Pedersen, who moved from the Rainforest Alliance back to the United Nations Development Programme in 2014. “Colombia has the best-organized coffee sector of any production country.”

In some cases, farmers were able to earn a financial benefit from certification, but price premiums for certified coffee were inconsistent over time. Matching the supply and demand of certified coffee was difficult in the volatile global market. “The market was very important for building certification,” said Oscar Nausa, who left Fundación Natura in 2014 to work at another Colombian NGO that supported smallholder farmers. “But it was also dangerous because the market changed. When the market showed interest in certified coffee, many farmers wanted to get Rainforest Alliance certified. But as soon as the price premium dropped, priorities changed.”

The inconsistent market demand complicated coffee exporters' efforts to get farmers certified. “One year there was huge demand for certification, and the next year, it completely dropped off,” said Jorge Gómez of SKN Caribecafé. “It is totally inconsistent.”

The FNC faced the same problems. “Some years, we have clients that

want to buy a lot of certified coffee, and then the next year, they decide they want cheaper coffee from a different country,” said the organization’s Rodrigo Calderón.

Fluctuating market demand made it difficult to keep farmers engaged. “In some areas, we were very successful in getting people certified, but then there was not much demand for their coffee,” said Pedersen. “If farmers are getting a premium on only a small percentage of the coffee they sell, their hard work doesn’t pay off and they feel their work is not valued.”

While the demand for certified coffee fluctuated in North America and Europe, in some regions it never took off at all. “There is still a large part of the market that doesn’t care about sustainability,” said Ximena Rueda, who left the FNC in 2011 to pursue a career in academia and who had conducted several studies on certification systems. “You have soluble coffee sold all over Russia and Asia, for example. Those emerging markets are demanding a lot of coffee, but consumers there aren’t particularly interested in sustainability.”

Because only a small percentage of the global market was interested in buying Rainforest Alliance–certified coffee, the FNC and other coffee exporters focused their efforts on getting a sufficient number of farms certified to meet that demand, but there was no incentive to help all farmers get certified. Naturally, the exporters took the most cost-effective approach, working mostly with farms already in compliance with many of the SAN criteria. As a result, the certification initiative was unable to influence farmers most in need of improved production practices.

“You have some farmers—the best organized—who have multiple certifications and who have received trainings over and over again,” said Pedersen. “Everybody wanted to support the best farmers because it was easier. Those farmers might have seven different seals to offer to their buyers. But then you have many others who are not certified and have no access to any training. There are pockets [of farmers] that got this certification-driven development. But the majority of farmers weren’t in those pockets, so certification failed to create sector-wide change.”

Some observers of the process said it was time to look beyond certification systems as a solution for the agriculture sector. “Certification doesn’t work for everyone,” said Joel Brounen, the Colombia country director at Solidaridad Network, a Dutch environmental NGO that supported smallholder farmers. “You need to look at the costs and benefits of certifications, and certification doesn’t make sense for a large share of smallholders. We need to focus less on compliance alone and more on the value generated by sustainable practices, creating the most impactful changes at the lowest cost.”

Brounen, Pedersen, and most other observers agreed it was time for new solutions that would reach more farmers and that did not rely on market demand. One concern was that certification systems could not protect

watersheds and other important areas because of their voluntary nature. “You won’t find lots of biodiversity if you have a desert of noncompliance with one little certified farm in the middle,” said Rueda. “The efforts of all of the certified farms can be wiped out if the rest are polluting the water.”

Targeted policies that included all farmers in the area were necessary to address those concerns. “We need to think about territorial management: working with whole regions and focusing on farms in a strategic way to keep the environment healthy,” Calderón said.

Rueda said certification was not the most effective solution to convince farmers to conserve forests or switch to shade-grown coffee, because in many cases, those changes reduced a farm’s productivity. “Farmers are not going to sacrifice productivity for tree cover,” she said. “But we can find supplementary strategies to fix those problems—for example, through payments for environmental services in regions where we think biodiversity and water quality are of paramount importance.” Payments for environmental services, a public policy pioneered by Costa Rica in the 1990s (see: [Creating a Green Republic: Payments for Environmental Services in Costa Rica, 1994–2005](#)), offered farmers an annual payment in return for conserving natural ecosystems.

New solutions were more urgent than ever in 2017 as the potential impacts of global warming on the coffee industry became increasingly apparent. More extreme weather patterns would likely reduce coffee yields in Colombia, and some areas would become unsuitable for growing coffee in the future, according to several studies.¹⁰¹¹ “A lot of coffee-growing areas are going to suffer as the climate changes,” Brounen predicted. “Certification alone can’t help with that. We need new and custom-made solutions at the landscape level.”

References

¹ *Additional Criteria and Indicators for Coffee Production*, Sustainable Agriculture Network, November 2005; www.rainforest-alliance.org/business/agriculture/documents/criteria_coffee_2005.pdf

² Andrés Valencia, “2011, un año de comercialización con alto valor agregado.” *Detrás del café de Colombia: perspectiva desde el origen*, Federación Nacional de Cafeteros, February 2012; www.cafedecolombia.com/cci-fnc-es/index.php/comments/2011_un_ano_de_comercializacion_con_alto_valor_agregado

³ Oliver Bach, “RAS NaturaCert menores de edad en Colombia.” Received by NaturaCert, October 2012.

⁴ Information provided by FNC Bucaramanaga office.

⁵ Jason Potts et al., “Coffee Market.” *State of Sustainability Initiatives Review*, 2014, pages 155-186; www.iisd.org/pdf/2014/ssi_2014_chapter_8.pdf

⁶ David Hughell and Deanna Newsom, *Impacts of Rainforest Alliance Certification on Coffee Farms in Colombia*. Rainforest Alliance, May 2013; www.rainforest-alliance.org/sites/default/files/2016-08/cenicafe-report.pdf

⁷ Jeffrey Milder and Deanna Newsom, *SAN/Rainforest Alliance Impacts Report*. Rainforest Alliance, December 2015; www.rainforest-alliance.org/sites/default/files/2016-08/SAN_RA_Impacts_Report.pdf

⁸ UNDP Project Document, “Biodiversity Conservation in Coffee: Transforming Productive Practices in the Coffee Sector by Increasing Market Demand for Certified Sustainable Coffee.” Global Environment Facility, 2006; <https://www.thegef.org/project/biodiversity-conservation-coffee-transforming-productive-practices-coffee-sector-increasing>

⁹ Alexandra Tuinstra and Michelle Deugd, *Rainforest Alliance Certification in Coffee Production: An Analysis of Costs and Revenues in Latin America 2010–11*. Rainforest Alliance, March 9, 2015; www.rainforest-alliance.org/impact-studies/Rainforest-Alliance-Certification-in-Coffee-Production

¹⁰ Corey Watts, “A Brewing Storm: The Climate Change Risks to Coffee.” *Climate Institute*, September 2016; www.fairtrade.com.au/~//media/fairtrade%20australasia/files/resources%20for%20pages%20-%20reports%20standards%20and%20policies/tci_a_brewing_storm_final_24082016_web.pdf

¹¹ Christian Bunn et al., “A Bitter Cup: Climate Change Profile of Global Production of Arabica and Robusta Coffee.” *Climatic Change*, vol. 129, no. 1-2, March 2015, pages 89-101; <http://link.springer.com/article/10.1007/s10584-014-1306-x>

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