2015
SAN/Rainforest Alliance
Impacts Report
Evaluating the Effects of the SAN/Rainforest Alliance Certification System on Farms, People, and the Environment
Executive Summary
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Executive Summary

Jeffrey C. Milder and Deanna Newsom

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About the Sustainable Agriculture Network (SAN)
The Sustainable Agriculture Network (SAN) is a coalition of nonprofit conservation organizations promoting the environmental and social sustainability of agricultural activities through the development of standards for best practices, certification and training for rural farmers around the world.

About the Rainforest Alliance
The Rainforest Alliance is an international nonprofit organization that works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices and consumer behavior. The organization’s approach includes training and certification to promote healthy ecosystems and communities in some of the world’s most vulnerable geographies.
Executive Summary
The coffee beans and tea leaves, bananas and mangos, chocolate and orange juice that brighten the breakfast tables of people around the world all too often begin their journey in a place that is not so cheery. Throughout the tropics and subtropics, agriculture is a major contributor to forest destruction, water pollution, labor abuses, entrenched poverty and child labor. But it does not have to be this way. Agriculture can be productive and profitable for farmers and workers, an important engine of economic and community development, and an integral part of sustainable and resilient rural landscapes.

The Sustainable Agriculture Network (SAN) and the Rainforest Alliance seek to transform agriculture into a sustainable activity that conserves biodiversity and supports sustainable livelihoods. The jointly-managed SAN/Rainforest Alliance certification system supports this change by defining a framework of good practices for sustainable agriculture (the SAN Standard), training and supporting producers to implement these good practices, and certifying (through independent audits) those producers who achieve this norm of sustainable performance. From 2010 to 2014, SAN/Rainforest Alliance certification expanded rapidly, and it now covers 1.2 million farms in 42 countries, growing 101 different crops on about 3.5 million hectares—an area nearly the size of Switzerland. At the end of 2014, production from Rainforest Alliance Certified™ farms that met the criteria of the SAN Standard accounted for 15.1 percent of the total world production for tea, 13.6 percent for cocoa and more than 5 percent each for coffee and bananas.

But has all this growth in the marketplace and on the ground yielded real benefits toward the ultimate aims of the SAN/Rainforest Alliance certification system—conserving biodiversity, safeguarding natural resources, increasing farm productivity and profitability and improving the lives of farmers, workers and their families? While it is impossible to generalize across all certified operations, substantial evidence now indicates that these benefits are being achieved across a diversity of crops, countries and farm sizes. This evidence comes from multiple sources. Independent researchers have been visiting Rainforest Alliance Certified farms to determine whether practices are changing, and if so, what effects these changes have on farms, ecosystems and livelihoods. Rainforest Alliance staff have been analyzing information from farm audit reports in new ways to gain greater insights into field-level results. And farmers have been sharing their experiences, reflecting on what has changed—or what has not—since their farms became certified.

This first-ever SAN/Rainforest Alliance Impacts Report distills this diverse evidence base to present an overall portrait of the certification system’s results from 2010 to 2014. After presenting a global snapshot of the scope and geographic distribution of certified farms, the report focuses on results related to our most widespread certified crops (coffee, cocoa, tea and bananas), followed by in-depth analyses of results related to livelihoods, water, biodiversity and climate change—all key issues and challenges for farmers and rural communities. Along the way, the reader can find numerous case examples featuring the certified producers, SAN members and local partners who implement the SAN/Rainforest Alliance certification system on the ground.

The report reaches several key conclusions about the effects of SAN/Rainforest Alliance certification:

- **Certified farms apply more sustainable farm practices than non-certified farms.** Across several crops and countries, certified farmers were found to implement sustainable practices at a higher rate than non-certified farmers. More than ten studies using multiple credible methods have showed that
certified farms apply good practices related to environmental management, worker health and safety, and farm productivity significantly more often than non-certified farms.

- **As farms remain in the system for two or more years, their sustainability practices tend to improve over time.** Time series data for producers remaining in the certification program indicate that, in the period from 2011–2014, a high proportion of initial non-conformities to the SAN Standard (less sustainable practices) were resolved through the adoption of more sustainable practices. Additionally, during this period, overall levels of conformance with SAN criteria increased substantially, from 90 percent to 94 percent for bananas in Central America, from 83 percent to 88 percent for coffee in Central America, from 85 percent to 88 percent for cocoa in West Africa, and from 87 percent to 93 percent for tea in East Africa. These time-series results from 219 Rainforest Alliance Certified operations suggest that as producers stay in the system longer, they are able to resolve many weaknesses initially flagged by auditors and continually improve their performance.

- **A minority of sustainability topics remain persistent challenges in certain crops and locations.** Despite the overall trend toward improvement over time, some sustainability topics and corresponding SAN criteria registered little progress (or even an increase in non-conformances) while others registered progress but continued to have a meaningful proportion of non-conformant producers. These topics included agrochemical management in coffee and cocoa, riparian zone protection in cocoa and bananas, worker housing in coffee and tea, waste management in bananas, shade cover in cocoa, and wastewater monitoring in cocoa, coffee and tea. The reasons for
these results differ by crop and context and highlight the need for additional training and support, industry investment, and, in some cases, modifications to the SAN Standard.

- **Certification benefits small-scale producers—though not always in the ways they expect.** There is little evidence of large certification price premiums accruing to Rainforest Alliance Certified farms. But the findings in this report cast doubt on the conventional wisdom that without price premiums to compensate for costs of certification, farmers will lose interest. This is because smallholder farmers applying the agronomic practices outlined in the SAN Standard are found to increase productivity and profitability in most instances where these outcomes have been evaluated. These gains, together with other benefits such as increased access to training and improved environmental quality and health, are cited by farmers as important sources of value and reasons to stay certified.

- **Certified farms contribute to protecting local water resources.** At least seven published studies have documented positive effects of SAN/Rainforest Alliance certification in protecting water quality on and around certified farms. These results were mostly in the areas of improved erosion control, reduced agrochemical use and more effective wastewater treatment.

- **Certification contributes to healthier natural ecosystems, not just on the farm but in the surrounding landscape.** Multiple studies have documented increases in tree cover and wildlife protection on certified farms, relative to non-certified farms or relative to pre-certification conditions. Furthermore, the shade trees, natural ecosystem patches and riparian corridors on certified farms can contribute to conservation in the broader landscape, as found by independent studies in Brazil, Colombia and Ethiopia.

At least as interesting as these individual results is the picture that emerges when viewing them together. It is a picture that presents numerous “win-win” opportunities on tropical and subtropical farms: that is, opportunities to simultaneously increase productivity, improve livelihoods and conserve nature through better ways of managing soils, water, fertilizer, pesticides, tree cover, and waste, and more equitable ways of treating workers. The SAN Standard codifies a set of practices hypothesized to deliver such win-win gains, and the evidence reviewed here indicates that these practices are generally delivering the intended results.

While the evaluation results are largely positive, this impact report is also useful for identifying important areas for improvement, such as those noted above. With this information in mind, SAN members and their partners can more effectively target future investments in training and farmer support.

Finally, while this report reviews more than 20 research studies as well as conformance and practice adoption data from more than 540 audit reports, further study is still needed, especially in the following areas:

- to investigate other (yet unstudied) outcomes of certification
- to furnish evidence for additional locations, crops, and contexts
- to understand the changes that occur before producers apply for certification, during which time they are hypothesized to improve as they prepare to become certified
- to gain greater insight into the individual and combined effects of training, certification, and other SAN/Rainforest Alliance support strategies in contributing to Theory of Change outcomes; and
- to understand better the contextual conditions affecting the delivery of key outcomes

We invite and encourage interested researchers to take up these important questions in the context of SAN/Rainforest Alliance certification to expand further the evidence base about where and how certification can best contribute to bringing about a world where sustainable agriculture is the norm.
The Sustainable Agriculture Network (SAN) and Rainforest Alliance work with farmers around the world to make sustainable agriculture the norm while conserving biodiversity and ensuring sustainable livelihoods.

Did you know?
SAN/Rainforest Alliance's global reach spans...

- 42 countries
- 101 different crops
- 1,200,000 farms (76% of them < 2 ha in size)

We engage the marketplace to build demand for sustainable food & beverage products—enabling companies and consumers to make ethical purchasing decisions that benefit farmers around the world.

Share of SAN/Rainforest Alliance Certified crops in total world production

<table>
<thead>
<tr>
<th>Crop</th>
<th>2014</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea</td>
<td>15.1%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Cocoa</td>
<td>13.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Coffee</td>
<td>5.4%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Banana</td>
<td>5.6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

At the field level, we drive continuous improvement toward sustainable agriculture through:

- Farmer training and support
  Delivered by the ten SAN member organizations and their partners around the world, and...

- Implementation of the SAN Sustainable Agriculture Standard, addressing best practices in ten areas:
  - Social and environmental management system
  - Ecosystem conservation
  - Wildlife protection
  - Water conservation
  - Fair treatment and good working conditions
  - Occupational health and safety
  - Community relations
  - Integrated crop management
  - Soil management and conservation
  - Integrated waste management
Our Impacts

Farms become more sustainable over time, as producers progressively improve soil and water management, worker health and safety, agronomic practices, social conditions and livelihoods, and conservation-friendly farming.

**Improved practices:** SAN/Rainforest Alliance Certified farms adopted the following sustainable practices at significantly higher rates than nearby non-certified farms:

- maintained protective buffer zones around environmentally sensitive areas
- protected water bodies using fencing and reforestation
- used soil analysis to guide fertilizer application
- trained workers on first aid, recycling, and the safe application of agrochemicals

**Improved practices:** Average percentage of certified operations’ initial SAN Standard non-conformities (poor management practices) that were eliminated (replaced by best management practices) by the most recent audit, between 2011 and 2014.

<table>
<thead>
<tr>
<th></th>
<th>Tea farms in East Africa</th>
<th>Cocoa farms in West Africa</th>
<th>Coffee farms in Central America</th>
<th>Banana farms in Central America</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>83%</td>
<td>64%</td>
<td>57%</td>
<td>82%</td>
</tr>
</tbody>
</table>

**Key outcomes and broader impacts:** Scientific research has shown that SAN/Rainforest Alliance Certified farms generally outperform non-certified farms in the four key outcome areas identified in our Theory of Change:

**Biodiversity conservation**
Compared with non-certified farms, certified farms have:
- More on-farm trees, native tree species, and tree canopy layers (coffee farms in Colombia)
- A greater diversity of aquatic macroinvertebrates (coffee, Colombia)
- Higher rates of migratory bird survivorship (coffee, El Salvador)
- Reduced deforestation rates (coffee, Ethiopia)

**Farmer, worker, and family wellbeing**
Compared with non-certified farms, workers on certified farms:
- Have children with a median educational achievement that is two years higher (coffee, Colombia)
- Wear personal protective equipment at a higher rate (coffee, Colombia)
- Have better access to sick leave and maternity/paternity leave (tea, India)

**Natural resource conservation**
Compared with non-certified farms, certified farms have:
- Better soil health, indicated by more organic matter (cocoa, Ghana)
- Streambanks covered in more erosion-controlling vegetation (coffee, Colombia)
- Better water quality (coffee, Colombia)

**Farm productivity and profitability**
Compared with non-certified farms, certified farms have:
- Yields that are 1.5 to 2 times higher (cocoa, Ghana and Côte d'Ivoire; coffee, Peru and Colombia)
- Higher product quality (tea, Kenya)
- Higher farmer income (cocoa, Côte d’Ivoire; coffee, Peru)
Acknowledgments

This is an excerpt. To read the full text of this report, visit rainforest-alliance.org/publications/impacts-report-2015

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