Assessment of the Starbucks Coffee and Farmer Equity (C.A.F.E.) Practices Program
FY08 - FY10

Prepared by:
Bambi Semroc, Elizabeth Baer, Joanne Sonenshine and Marielle Canter Weikel

March 2012
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Executive Summary

Since March 2008, Starbucks and Conservation International have been working to assess the results of the Coffee and Farmer Equity (C.A.F.E.) Practices program to date, in order to identify where suppliers are performing well and where additional, targeted supplier development initiatives would deliver the greatest benefits. Since the launch of C.A.F.E. Practices in 2004, the hypothesis has been that implementation of the program will result in the increased uptake of improved hiring practices, working conditions, coffee-growing and coffee-processing practices over time, and that this in turn will serve to improve producer livelihoods and conserve the natural habitat necessary to maintain ecosystem services for communities, coffee production and nature conservation. The publication of the FY08 assessment study in March 2011 marked a key milestone along the journey towards greater understanding of strengths and opportunities for the program, but provided only a baseline from which to compare future performance. This report, which looks at performance from FY08 through FY10, is the first that looks at performance over time for applications, farms, Producer Support Organizations (PSOs) and mills participating in the program.

Using the verification reports generated by verifiers for suppliers participating in the program, we can begin identifying trends over the three years to better understand how performance is changing over time, although the population of applications, farms, PSOs and mills undergoing verification varied significantly from year to year. In addition, by analyzing the subset of verification reports for applications that underwent re-verification during this period, we can begin to understand whether or not suppliers remaining in the program are adopting more practices over time and achieving higher approval status and/or application-level scores. Due to only a small number of applications requiring re-verification in FY09 and the relatively small number of new applications in that year, most of the results show FY09 as disrupting any clear trend over the three years.

Although the population of verifications did vary from year to year, this analysis has identified several areas where performance has been high among suppliers participating in the program, as well as areas where further supplier development efforts may be warranted to enable farms, mills and PSOs to improve performance over time. Key highlights from this analysis include:

Applications

- C.A.F.E. Practices has an extensive geographic reach across three continents and 20 countries, many of which overlap with regions of global biodiversity importance.

- Suppliers achieved higher performance in the program over time. For instance, average application scores for all applications verified increased by 27 percentage points between FY06 and FY10. In addition, of those applications verified twice during the FY08-FY10 period, 30% achieved an improved approval status and 60% saw their total aggregate score improve during the second verification.

- The number of applications receiving a non-compliant status decreased by 92% over the three years and there was a 112% increase in the number achieving strategic status over the past five years. The continued ability of the C.A.F.E. Practices program to detect instances of non-compliance with the zero-tolerance indicators relating to payment of minimum wage and employment of minors under the age of 14 is a compliment to the strength of the verification process.

Farms and Producer Support Organizations

- Small farms of less than 12 hectares continue to make up the vast majority of farms participating in the program. A significant portion of these farms also processed their coffee, far outnumbering the number of wet mills participating in the program.
• Every small farm verified through the program from FY08 to FY10 ensured that children attended school. The majority of the farms participating in the program paid workers wages exceeding the legal minimum.

• Farmers are conserving the remaining natural forest areas on their lands. Nearly 100% of all farms verified over the FY08-FY10 time period did not convert any natural forest area to agricultural production.

• The vast majority of medium and large farms verified have set aside at least 5% of their land for conservation and most were protecting areas of high ecological value on their farms.

• Only 1-2% of farms are continuing to use chemicals listed as Type 1A and 1B by the World Health Organization.

• Nearly 100% of farmers are taking steps to conserve at least a portion of the water bodies on the farm from sedimentation and nutrient runoff.

• Nearly all of the PSOs verified had tracking systems from the point of purchase to point of export, as well as annually updated lists of producers participating in the C. A. F. E. Practices program.

**Mills**

• Over half of the stand-alone mills doing wet and/or dry processing paid workers wages exceeding the legal minimum.

• The vast majority of full-time workers employed by mills received paid sick leave.

• Mills made significant contributions to education between FY08 and FY10, with all of those located in areas with insufficient primary education providing these services to the children of workers living on the mill.

• The vast majority of small farms and stand-alone mills are managing processing wastes in a way that does not contaminate the local environment.

• Nearly all of the mills using wood as a fuel source took precautions to ensure that the wood was sourced from coffee prunings and/or well-managed forests.

In addition to identifying the highlights noted above, the analysis also identified the following areas for continued supplier and program development:

• Within the population of farms that underwent re-verification during the FY08-FY10 time period, 10% experienced a decline in approval status as a result of the subsequent verification, and 60% had no change in status. There is a need to identify what it would take to have the 60% shift to an improved status to guide supplier development strategies. It is also important to understand what drove the decline in status for the other 10%.

• The program is seeing an increase in the proportion of applications composed of a mix of farm sizes, which makes it difficult to extract trends in purchasing according to farm size. Nevertheless, small farms continued to make up a significant portion of purchases in FY10, with 30% of purchases coming from applications consisting solely of small farms.

• Starbucks and its suppliers should continue to encourage farms and mills to pay the legal minimum wage to workers on the farm, and temporary/seasonal workers in particular. Suppliers should also be encouraged to provide the legally required benefits to workers, given that compliance rates related to legally mandated benefits in FY10 were relatively low compared to previous years.
• Small-farm performance showed a strong correlation to that of PSOs, which points to the importance of these service providers in helping to ensure small-farm networks have access to the resources and training needed to improve performance over time.

• Additional awareness regarding the importance of buffer zones protecting water from agrochemical application is needed for the 19-23% of farms that applied chemicals within 10m of water bodies.

• There is significant opportunity to increase the proportion of medium and large farms with monitoring programs in place related to C. A. F. E. Practices performance, as this was the criteria indicator with the lowest level of compliance.

• There may be a need to target technical assistance and training to medium-sized farms on practices related to the conservation of areas of high ecological value, the protection of waterways from agrochemical runoff, as well as in finding and promoting alternatives to WHO Type 1A and 1B chemicals, where between 8% and 21% of farms were not in compliance over the three-year period.

• Small farms could benefit from additional assistance in the adoption of cover crops and leguminous trees to maintain soil fertility over time, as these farms had significantly lower adoption rates of these practices than medium or large farms.

• PSOs should be encouraged to increasingly provide farmers within their network with a written agreement or identification system upon commitment to comply with C. A. F. E. Practices, as this would help ensure small farms are aware of the program and their own participation within it.

• Ensuring that all mill workers have access to potable water should also be a priority for the program. This would be a major milestone and address the fact that 8-31% of mills verified failed to provide workers with this basic necessity.

• Additional assistance to mills may be necessary to enable further increases in energy efficiency over time, as compliance rates for this indicator were at or below 34% across the three years.

Thus, although there are many areas where applications, farms, PSOs and mills performed well in the program, there are also many opportunities for Starbucks to promote improvements through the program. This is of particular importance as the company works to secure a sustained supply of high-quality, ethically sourced coffee on into the future.
1. Introduction

In 2011, Starbucks Coffee Company and Conservation International (CI) released the first global assessment of the Coffee and Farmer Equity (C. A. F. E. ) Practices program\(^1\) based on verifications that occurred during Starbucks fiscal year 2007 and were eligible for purchase through the program in FY08. The publication of that report represented a significant milestone for the C. A. F. E. Practices program, and for verification and certification systems more broadly, as it was the first comprehensive analysis of verification data completed and made publicly available in an effort to establish a transparent baseline to which future performance of the program would be benchmarked.

The objective of that study was to establish a monitoring and evaluation process allowing for an annual assessment of the program that would capture findings, make recommendations for improvement and/or targeting of technical assistance to specific regions, and enable improved public reporting and communications about the program. These assessments would test the hypothesis underpinning the program: that implementation of the program will result in the increased uptake of improved hiring practices, working conditions, coffee-growing and coffee-processing practices over time, and that this in turn will serve to improve producer livelihoods and conserve the natural habitat necessary to maintain ecosystem services for communities, coffee production and nature conservation. By analyzing verification data we can draw conclusions as to whether farms, mills and PSOs are adopting more of the better practices over time. Supplementary studies are needed, however, to determine whether the adoption of these practices has led to enhanced productivity, long-term viability of farms, improved household livelihoods and/or increased environmental conservation in coffee production areas.

This report represents the second global assessment of C. A. F. E. Practices and includes analysis of verifications for Starbucks fiscal years 2009 and 2010. Having three years of data for the program makes possible the inclusion of trend analysis for the first time. The trend analysis looks at changes in levels of participation and adoption of better practices among participating producers during the 2008-2010 time period. This is especially the case where applications (representing farms, mills and producer support organizations) underwent a re-verification during this time period, the subject of which will be the basis for an addendum to this report.

In addition to conducting global assessments of the program, Starbucks and CI have also conducted field surveys in two key sourcing countries – Guatemala and Colombia – to analyze whether participation in the C. A. F. E. Practices program has had an influence on farmer livelihoods, adoption of better practices and environmental conditions in the selected landscapes when compared to farmers who did not participate in the program.\(^2\) These field surveys supplement the global assessment by enabling a deeper understanding of the profile of small-scale coffee producers in these countries and how the program and coffee production more generally affect household livelihoods and the environmental landscape.

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2. These studies are available at http://www.conervation.org/campaigns/starbucks/Pages/CAFE_Practices_Results.aspx.
2. Methodology

This report provides an analysis of verification reports for applications that underwent the verification process for Starbucks fiscal years 2009 and 2010 (FY09 and FY10). It presents findings at the global, regional and country levels for the environmental and social indicators used to verify producer performance of applications, farms, producer support organizations (PSOs) and mills.

The methodology applied in conducting the analysis for this report builds on that developed for the FY08 global assessment report to enable evaluation of trends over the FY08-FY10 period. For applications verified during this period, third-party accredited verifiers conducted verifications of farms, mills and, in applications with small farms, PSOs and entered the results into the Starbucks Verifier Reporting System (VRS). Starbucks staff worked with the VRS service provider to generate exports of the data for applications, farms, mills and PSOs for each fiscal year. Starbucks also provided supplemental data from its agronomy database on the number of small farms that conducted wet milling. CI staff worked closely with Starbucks staff to review the data files provided and make minor corrections to the data where necessary.

Between FY09 and FY10, Starbucks made a change to the C. A. F. E. Practices program which had some implications for this analysis, in particular, relating to how applications were assigned a validity start date for their status in the program and eligibility for purchase. In September, 2009 Starbucks made the decision to assign a validity start date to applications corresponding to the fiscal year in which the verification occurred, whereas historically the start date corresponded to the fiscal year following the year when the verification occurred. This resulted in verifications that occurred during FY09 having validity based on the old system and these were noted as FY10* in the Starbucks database and were considered a separate fiscal year from FY10. Those applications verified in FY10 were also assigned validity starting in FY10 and were designated as such. (See Table 1.) Thus, applications eligible for purchase through the program in F08 and FY09 underwent verification during the previous year or earlier if assigned a multiple-year validity. In FY10, however, some applications were verified in FY09 and others in FY10 itself due to the change made to the program. For the purposes of this analysis, we grouped applications verified in both FY10 and FY10* into a single set and considered them all a part of FY10.

<table>
<thead>
<tr>
<th>Application Available for Purchase Starting in FY</th>
<th>Approximate Timing of Verification</th>
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<tbody>
<tr>
<td>FY08</td>
<td>FY07</td>
</tr>
<tr>
<td>FY09</td>
<td>FY08</td>
</tr>
<tr>
<td>FY10*</td>
<td>FY09</td>
</tr>
<tr>
<td>FY10</td>
<td>FY10</td>
</tr>
</tbody>
</table>

Table 1: Verification Period and Start of Eligibility for Purchase Under C. A. F. E. Practices

Some applications were verified in both FY10* and FY10 application groups, and in these cases, we included only the most recent verification report in the analysis, unless there was a significant difference in the composition of farms in the repeat verifications. Of the six applications that underwent verifications in both FY10* and FY10, five were retained in the analysis, as the number of farms did change significantly between the two verifications. This programmatic change, coupled with a decision to extend the validity of applications expiring in FY09 and FY10 by an additional year, resulted in a relatively low number of applications verified in FY09 when compared to FY08 and FY10, and a concentration of many FY09 applications in relatively few countries. In addition, the verification reports for one application from Ethiopia verified in FY08 was not received in time for inclusion in that year’s analysis. This application was added to the FY09 group of applications to ensure its inclusion in the analysis. We envision that there will always be a few applications received after the global assessment report is complete and that these will be included in the analysis for the following year.

While having three years of data enables trend analysis for the 2008-2010 time period, these trends do not reflect the performance of a static group of participants (supply chains) across the three years. Instead, the trends reflect the composition of applications verified from fiscal year to fiscal year. The composition of applications verified varies by year due to a number of reasons, including:

In cases where application-level data exists for years prior to FY08, this is included in the analysis.
Some applications receive validity for multiple years and do not require re-verification until this validity expires;

In applications undergoing re-verification, sampling of applications containing medium and small farms requires that only 15% of the farms included in the previous sample are re-verified, while 85% of the sample represent previously unsampled farms;

Applications do not remain static from year to year, as export companies may decide to split or combine applications to increase efficiencies and achieve improved status, or to add farms to expand participation in the program;

Suppliers (applications) may choose to discontinue participation in the program; and

New suppliers (applications) may enter into the program in any given year.

Thus, the annual trends reported in this report represent results based on the composition of applications verified in a particular year, unless otherwise noted in the text. The one exception to this is in the analysis of purchasing data where purchases for a given year from C. A. F. E. Practices participants include all active (with a current validity) applications from which Starbucks purchased coffee during the fiscal year, rather than only those applications verified during that year. Analysis of the 268 applications that underwent re-verification during the 2008-2010 period identified that the majority of the re-verifyings occurring in FY10 were for applications previously verified in FY08, although these still represent a relatively small proportion of total applications verified in FY10. In addition, the percentage of applications that were re-verified and did not experience a change in the number of farms varied significantly from year to year, with the FY08-FY10 set having the highest rate of consistency at 67%. When the threshold is raised to no more than 50% difference in the number of farms in the application, the percentage for FY08-FY10 increases to 91%. (See Table 2.)

Due to the low level of re-verifications taking place and the variation in the farm counts within these applications, this report only looks at these re-verifications at the application level and only those that meet the 50% threshold stated above. Farm and mill-level results from re-verifications for FY08-F10 will be provided as an addendum to this report in the coming months.

<table>
<thead>
<tr>
<th>Re-verification Period</th>
<th># of Apps Re-verified</th>
<th>Apps with No Farm Count Variation</th>
<th>Apps with Farm Count Variation &lt;50%</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>FY08-FY09</td>
<td>27</td>
<td>5</td>
<td>19%</td>
</tr>
<tr>
<td>FY08-FY10</td>
<td>199</td>
<td>134</td>
<td>67%</td>
</tr>
<tr>
<td>FY09-FY10</td>
<td>36</td>
<td>19</td>
<td>53%</td>
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Table 2: Applications Re-verified During FY08-FY10 Period

The C. A. F. E. Practices program consists of 249 indicators used to assess the social and environmental performance of farms, mills and PSOs in an application. For each of these indicators, verifiers assign a compliant, non-compliant, or not-applicable rating within the VRS database. Because verifiers can mark an indicator as not-applicable for a given farm, mill or PSO, the number of entities reporting on any given indicator can vary greatly and often does. For this reason, the results provided in this report represent only those entities for which the given indicator was deemed applicable by the verifier. Reporting rates for each indicator are provided in the summary tables in the appendices.

This report provides a review of performance against a subset of the 249 indicators in the program based on the monitoring framework developed as part of the FY08 assessment process. The CI team reviewed this framework and updated it to ensure it continued to reflect priorities for the assessment and was sufficiently robust to encompass the trend analysis introduced in the current report.

At the country scale, a subset of indicators forms the basis for a consistent dashboard of select indicators that show performance trends for applications, farms, mills and PSOs. The dashboard includes a set of key performance indicators (KPIs) – selected by CI and Starbucks based on either their high levels of variation from country to country, or their ability to provide important information for management of the program. The KPIs are aggregated for all entities reporting within the country. Each dashboard also includes additional notable trends or other results.
unique to that country that are not captured by the KPIs. CI developed country dashboards for each country that had applications verified for FY09 and/or FY10. Although Burundi was included in the FY08 report, no applications underwent verification from that country in either FY09 or FY10, so it is not included.

The C. A. F. E. Practices program employs a stratified random-sampling methodology for applications that include small and/or medium farms guided by the established international standards for group certification (ISEAL Alliance, 2009). In contrast, all large farms participating in the program are included in the sample, with the exception of Brazil, where large farms are also sampled. As a result of the sampling procedures, 3.9% of the total farms included in applications were sampled in FY08, 1.7% were sampled in FY09, and 4.4% were sampled in FY10. In preparing the FY08 report, CI used Access and Excel software to extrapolate verification report data for sampled farms to the population of farms participating in the program noted in the individual applications. Starbucks worked with the VRS service provider to integrate this extrapolation process within that system which resulted in CI receiving extrapolated data for the FY09 and FY10 applications. The only exception to this was for small farms that conducted wet milling as CI continued to calculate these compliance rates. The team used this extrapolated data to determine compliance rates for the indicators included throughout the report. Where possible, the compliance rates were correlated to hectare and worker data collected as part of the verification process to determine the amount of land or number of people, respectively, affected by the adoption of a particular practice.

The presentation of findings begins with the following section of the report on global and regional results. The section begins with a discussion of applications and continues with farms, PSOs and mills. For each type of entity analyzed, a subset of key indicators guides the analysis for that section. The global and regional results are followed by a section that consists of country-level dashboards for each of the 19 countries applying to the program in FY09 and/or FY10. In Section 6 we draw conclusions and make recommendations for moving forward. This is followed by a series of appendices that show global results for each of the indicators included in the analysis.

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4 Brazil's coffee industry is unique in the world in that coffee farming happens on very large farms organized into very large networks. Although in other countries, verifiers visit each large farm contained in an application, visiting all large farms in Brazilian applications would be prohibitively expensive and resource-intensive. In order to create a practical approach to verification in the Brazilian context, Starbucks adapted the sampling methodology for large farms in Brazil, according to the sampling method applied to medium-sized farms.
3. Global Results

3.1 Applications

Applications form the basis for participation in the C. A. F. E. Practices, and the composition of the application determines the verification procedure necessary. An application can represent any type of supplier, ranging from a single farm or mill or thousands of small farms grouped together with one or more mills and a PSO, but must represent a complete supply chain, production through processing. Although the composition of applications varies significantly and can change over time, they form the basis for Starbucks purchasing transactions, for scoring and for assigning approval status within the C. A. F. E. Practices program. This section provides a summary of participation according to applications verified for any particular year and an overview of performance based on approval status and average scores. Where possible, the trends reach back to FY06 when the C. A. F. E. Practices program was first launched in Latin America.

3.1.1 Growth in Participation

- Number of applications verified per year
- Number of countries with applications verified per year

The rate of applications verified through the C. A. F. E. Practices program increased steadily between FY06 and FY08, dropped significantly in FY09 and began to rise again in FY10. (See Figure 1.) The number of applications verified peaked in FY08 at 804 and began to level out again in FY10 with 617 applications verified for that year, a difference of 23%. The number of applications verified for FY10 was also less than in FY07 (n=682). Only 154 applications were verified for FY09 and verifications were highly concentrated in that year, with 97 (63%) coming from just four countries. The drop in applications in FY09 is due primarily to the change made to the program to grant applications validity for the actual year of their verification rather than the following year. Due to this change many of the verifications that would have taken place in FY09 became part of the FY10 pool of applications. The broader overall decline in the number of applications verified per year is also due in part to the number of applications that received two- and three-year approval status in previous years. 5

![Figure 1: Number of Applications Verified Per Year, FY06-FY10](image)

5 Six mill-only applications were not included in the analysis, two of which were non-compliant mill-only apps.
North and Central America have had the most applications verified for any given year since the launch of the C. A. F. E. Practices program. (See Figure 2.) This trend continued in FY10 when 81% (n=500) of the applications verified came from that region and was in line with the 82% from North and Central America in FY08. The only year when this was not the case was FY09 and this was most likely due to the extension of validity or the change in how validity is assigned. Asia and Africa continued to have low numbers of applications verified for any given year and in 2010 represented 4% and 1% of verifications, respectively.

The number of countries with coffee producers undergoing verification varies from year to year, but over the course of the past five years for which data is available, coffee producers from 20 countries have participated in the program. (See Table 3) Across these five years, only five countries had applications undergoing the verification process in every year (Colombia, Costa Rica, El Salvador, Nicaragua and Peru). This is in part due to the program not being launched in Africa and Asia until FY07. Since FY07, 15 of the 20 countries have had at least one application verified each year.

Participating countries continue to overlap significantly with the biodiversity hotspots – the world’s most biologically rich regions that face significant threat. In addition, one country – Papua New Guinea – is a High Biodiversity Wilderness Area due to its high degree of natural forest remaining and high levels of species endemism. This overlap with areas of global biodiversity importance makes the environmental performance of C. A. F. E. Practices applications of particular relevance.

<table>
<thead>
<tr>
<th>Region</th>
<th>FY06</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>0</td>
<td>38</td>
<td>38</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td>Asia</td>
<td>0</td>
<td>25</td>
<td>36</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>North &amp; Central America</td>
<td>519</td>
<td>557</td>
<td>658</td>
<td>46</td>
<td>500</td>
</tr>
<tr>
<td>South America</td>
<td>35</td>
<td>62</td>
<td>72</td>
<td>62</td>
<td>86</td>
</tr>
<tr>
<td>Grand Total</td>
<td>554</td>
<td>682</td>
<td>804</td>
<td>154</td>
<td>617</td>
</tr>
</tbody>
</table>

Table 3: Participation in C. A. F. E. Practices by Region from FY06 to FY10

Although application numbers can provide some sense of the level of participation in a given year and the number of countries represented, these figures can under- and over-represent changes in participation over time. For instance, some applications may not require re-verification in a given year, which can result in under-representation of applications active in the program in any given year. Thus, although no applications were verified for a given year, that does not mean that the country had no applications eligible for purchase through the C. A. F. E. Practices program for that year. In other cases, suppliers may choose to combine several applications into a single application over time. Over-representation can also occur if suppliers choose to split an application into multiple applications to improve efficiencies and/or achieve a higher approval status.
3.1.2. Application Approval Status

- Percentage of applications achieving various approval status categories
- Percentage of small, medium and large farms in applications achieving various approval status categories
- Pounds of coffee deducted from the program due to non-compliance

Starbucks assigns an approval status for each application that has completed the verification process, ranging from non-compliant to strategic. Non-compliant applications are those failing to meet minimum requirements for selling coffee to Starbucks through the C.A.F.E. Practices program. The composition of the application determines the thresholds for non-compliance. For instance, applications that do not undergo sampling (e.g., those consisting solely of large farms) must meet all zero-tolerance requirements outlined in the program. For those applications in which sampling occurs, at least 50% of the verified farms must meet the zero-tolerance indicators. In some cases applications containing non-compliant farms or mills may be assigned an approval status, but in such cases Starbucks deducts the percentage of coffee produced by these non-compliant farms from the total amount of coffee eligible for sale through the program. The C.A.F.E. Practices scorecard is divided into subject areas and applications must meet these performance levels for each of the subject areas to achieve the given approval status. Verified suppliers meet minimum requirements and achieve a score of less than 60%. Preferred suppliers achieve scores ranging from 60 to 80% in all subject areas and strategic suppliers are those achieving a score of over 80% in all subject areas. In cases where sampling occurs within the application, the combined score of the sampled farms for the subject area (e.g., farms, wet mills) must meet the threshold.

The percentage of applications achieving higher approval status has increased over the past five years of the program. When looking at the absolute number of applications verified for each of the given years, the number of non-compliant applications dropped by 92% over this time period, declining from 112 in FY06 to only 9 in FY10. Over the same period, the percentage of applications achieving strategic status has increased by 112% as 172 applications achieved this status in FY10 compared to 81 in FY06. Since FY06 was a unique year in which the program was in its early implementation and only active in Latin America, it is worth looking at rates of change in approval status between FY07 and FY10. This also helps control for the difference in the number of applications undergoing verification as the totals were 682 in FY07 and 617 in FY10. Over the four years, the number of applications achieving strategic status increased by 51%, while the percentage failing to achieve an approved status declined by 86%.

When examining approval status by region from FY08 to FY10 based on the percentage of verifications that occurred in each year, we find that most regions saw a decline in the percentage of applications receiving a non-compliant status. (See Figure 3.) The exception to this trend is in Africa where in FY10 the percentage of applications with a non-compliant status actually increased from 12% to 20%. Africa also saw a relative decline in the percentage of applications achieving a strategic and preferred status. In Asia there was also a relative decline in the percentage of applications achieving a strategic status, but an increase in those meeting the preferred status requirements. The
region also saw a decline in the percentage of applications not meeting minimum standards for selling coffee through the program. For North and Central America, the data shows a positive trend toward more applications achieving strategic status and a decline in non-compliant applications. Finally, in South America the percentage of non-compliant applications fell during the period, as did those receiving preferred or strategic status as more applications fell in the verified category.

Figure 4: Application Approval Status by Percentage of Applications Verified per Region, FY08-FY10

These percentages, however, mask the fact that the actual number of applications failing to achieve an approved status in Africa actually fell during this period from four in FY08 to one in FY10, but the variation in the number of applications undergoing verification in the various years makes that one application equal 20% of all applications verified in Africa for FY10. (See Figure 4.) In addition, even though the absolute number of verifications in North and Central America declined from 658 in FY08 to 500 in FY10, the number achieving a strategic status actually increased from 152 to 165, respectively. For the other regions and approval status categories the differences between the percentages and actual number of verifications are less significant. Based on these results there may be a need for further research to better understand whether there are significant barriers to achieving strategic status for producers in Asia and Africa, as well as the reason for the declining percentage and absolute number of applications in South America achieving a strategic status.

Figure 5: Application Approval Status by Number of Applications Verified per Region, FY08-FY10

For those applications that underwent a re-verification between FY08 and FY10 having less than a 50% variation in the number of farms included in the application (n=233), we analyzed the change, if any, that took place in the approval status. This analysis found that 60% of the applications maintained the same status over time, 30% improved their status and 10% had their status decline as a result of the second verification. (See Table 4.) In 10 cases the declines in status spanned two levels (e.g., strategic to verified or preferred to non-compliant). There were also 15 cases where applications jumped two levels in approval status (non-compliant to preferred or verified to strategic).
Change in Status (from previous verification to most recent)  |  No. of Apps  |  % of Apps
--- | --- | ---
**Improved Status**
NC to Verified  | 3  | 1%
NC to Preferred  | 1  | 0%
Verified to Preferred  | 33  | 14%
Verified to Strategic  | 14  | 6%
Preferred to Strategic  | 19  | 8%

**Decline in Status**
Verified to NC  | 4  | 2%
Preferred to Verified  | 8  | 3%
Preferred to NC  | 1  | 0%
Strategic to Preferred  | 2  | 1%
Strategic to Verified  | 9  | 4%

No Change  | 139  | 60%
Total  | 233  | 100%

Table 4: Change in Approval Status for Applications Re-verified Between FY08 and FY10

### 3.1.3. Amount of Coffee Purchased through C. A. F. E. Practices

- Pounds of coffee purchased from C. A. F. E. Practices-approved suppliers
- Percentage of coffee purchases from large, medium and small farms
- Percentage of purchases by length of validity status term

The percentage of Starbucks coffee purchased through the C. A. F. E. Practices program has steadily increased over time, rising from 77% in FY08 to reach 84% in FY10. In FY10, Starbucks purchased C. A. F. E. Practices-verified coffee from 15 countries spanning three continents. This is down from 18 countries in FY08.

![Figure 6: C. A. F. E. Practices Purchases as Percentage of Total Starbucks Coffee Purchases, FY08-FY10](image)

During this same period, there was also a decrease in the percentage of C. A. F. E. Practices purchases made from applications consisting solely of small farms, although small farms were increasingly included in applications with medium and/or large farms. (See Figure 7.) Overall, the program is seeing an increase in the proportion of applications composed of a mix of farm sizes, which makes it difficult to extract trends in purchasing according to farm size. For instance, the percentage of C. A. F. E. purchases by volume from applications consisting of a mixture of small, medium and large farms increased from 3% in FY08 to reach 30% in FY10. Nevertheless, small farms continued to make up a significant portion of purchases in FY10, with at least 30% of purchases coming from applications consisting solely of small farms. During the same period, the proportion of C. A. F. E. Practices
purchases from applications composed solely of large farms increased slightly from 16% in FY08 to 22% in FY10. The data also shows a decline in the percentage of applications verified prior to 2008 for which farm size data was not available due to systems limitations. Thus, the FY10 purchases data represents the first year in which more than 99% of the applications had farm size data.

Figure 7: C. A. F. E. Practices Purchases according to Farm Size, FY08-FY10

FY10 also saw an increase in the percentage of C. A. F. E. Practices coffee purchases from applications receiving a verified status. (See Figure 8.) Of the 77% of C. A. F. E. Practices-approved coffee purchased in 2008, half was from verified suppliers, whereas this increased to 61% in FY10. One revision made to the program in FY09 was the addition of provisional status, which is the status granted prior to the verification process being complete. In FY09, provisional status applications accounted for 6% of C. A. F. E. Practices coffee purchases, and 2% by FY10.

Figure 8: C. A. F. E. Practices Purchases According to Approval Status, FY08-FY10
Based on the volume of coffee purchased over the three-year time period, the vast majority of applications had an approval status that was valid for two years or more\(^6\). Single-year validity only accounted for 20% or less of the total coffee purchased through C. A. F. E. Practices in any of the three years. Applications with three-year validity made up the highest proportion of C. A. F. E. purchases for the North and Central America region and reached 40% in FY10. (See Figure 9.) Applications selling C. A. F. E. Practices-approved coffee from Africa also tended to have higher rates of three-year validity when compared to those from Asia or South America.

![Figure 9: Regional C. A. F. E. Practices Purchases by Length of Validity Status, FY08-FY10](image)

### 3.1.4. Supplier Performance

- Average application scores

Average application scores can also provide some insight into trends in overall performance of verifications that have taken place over time. Within C. A. F. E. Practices, each application receives an overall score, as well as scores for social responsibility, coffee growing, wet coffee processing, dry coffee processing and economic accountability. Since the application pool varies from year to year, these scores reflect only the general performance of supplier networks verified in the program for any given year.

Average scores in each of the categories have increased over the past five years. (See Figure 10.) The average total score of applications rose to from 52% in FY06 to 78% in FY10. 2010 saw the highest application scores across all subject areas of all years on record. There was also a slight increase in the average total score between FY07 when Africa and Asia entered the program and FY10, and also between FY08 and FY10. Between FY08 and FY10, the most significant increases in average scores occurred within the two coffee-processing categories. In most cases, the scores dipped in FY09, but this could be due to the significant decline in the number of applications verified for that year.

Analysis of the data at the regional level shows some variation in the global trends presented above. For instance, the South America region saw a peak in average total scores for applications verified for FY08, with a slight decline in FY09 and FY10. The same trend in total scores also occurred for African applications. For the social responsibility scores, the North and Central American region is the only region to show a continuous upward trend from FY07 to FY10. Each of the other regions experienced a slight decline in its social responsibility scores in FY10 when compared to either FY08 or FY09. The same trend holds for the coffee-growing average scores, with the North and Central America region experiencing an upward trend and the others experiencing a slight decline after FY08. For the economic accountability scores, Africa and South America saw increases between FY09 and FY10, whereas the others experienced a slight decline.

\(^6\) An application’s approval status may be valid for one, two, or three years, depending on factors including the type of supply chain, whether the verification occurred during harvest, whether any zero-tolerance failures were present and other factors. See C. A. F. E. Practices program documents for further explanation.

\(^7\) Due to the shift in assignment of validity status between FY09 and FY10, applications that had validity status that would expire between September 30, 2009 and September 30, 2010 were granted an additional year of validity.
Table 5: Indicator Trends for Re-verified Applications, FY08-FY10

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of Applications</th>
<th>Percentage of Applications</th>
<th>Range of Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Score Increased</td>
<td>No Change</td>
<td>Score Decreased</td>
</tr>
<tr>
<td>Social Responsibility</td>
<td>128</td>
<td>9</td>
<td>96</td>
</tr>
<tr>
<td>Coffee Growing</td>
<td>154</td>
<td>7</td>
<td>72</td>
</tr>
<tr>
<td>Coffee Processing Wet</td>
<td>86</td>
<td>78</td>
<td>69</td>
</tr>
<tr>
<td>Coffee Processing Dry</td>
<td>17</td>
<td>179</td>
<td>37</td>
</tr>
<tr>
<td>Smallholder Social Responsibility</td>
<td>50</td>
<td>145</td>
<td>34</td>
</tr>
<tr>
<td>Smallholder Coffee Growing</td>
<td>68</td>
<td>129</td>
<td>32</td>
</tr>
<tr>
<td>Smallholder Coffee Processing</td>
<td>31</td>
<td>191</td>
<td>19</td>
</tr>
<tr>
<td>PSO</td>
<td>55</td>
<td>136</td>
<td>38</td>
</tr>
<tr>
<td>Legacy Total Aggregate</td>
<td>139</td>
<td>13</td>
<td>81</td>
</tr>
</tbody>
</table>

There were 233 C. A. F. E. Practices applications re-verified during the FY08-FY10 time period for which the number of farms in the application did not change by more than 50%. These applications represented all countries participating in the program except Tanzania, Bolivia, Brazil, Ethiopia, Kenya and Rwanda. Among these applications the majority (60%) improved their total score during the second verification, while 6% stayed the same and 35% experienced a decline in their score. (See Table 5.) The change in total aggregate scores ranged from a decline of 30 to an increase of 67. Across all of the other score categories the percentage of applications achieving either no change or an increase was significantly greater than those experiencing a decline, and this represents a positive trend for the program. Scores fluctuated the most for the coffee-growing and social responsibility categories and remained relatively stable with no change for the wet coffee processing, dry coffee processing, PSO and smallholder scores. Dry coffee processing scores had the lowest proportion increasing their performance over time with just 7% of the mills showing any improvement. Social responsibility scores showed the greatest tendency to decrease over time, with 41% of applications receiving lower scores during the second verification. By contrast, coffee-growing scores were the most likely to improve over time with 66% increasing their scores during the second verification. When looking at smallholders, however, this dropped to only 30% improving their scores through the second verification. Thus, there may be some barriers to small farms improving their performance at the same rate as medium and/or large farms.
3. 1. 5. Conclusions and Recommendations from Application Analysis

Applications verified over the analysis period show the following in relation to the general profile of the program:

- The number of applications verified varied considerably from year to year, either due to the number receiving multiple-year validity based on high performance in the program, or extension of validity for those applications expiring in FY09 and FY10 that met certain conditions.

- The majority of applications were from North and Central America in all years aside from FY09, when South America had the most applications undergoing verification.

- The representation of countries in the applications also varied by year, as only five of the 20 countries had applications verified for each year for the FY08-FY10 period.

In terms of performance, trends were generally positive, especially in relation to average scores for applications and the percentage of coffee purchased through the program. More specifically:

- Average application scores increased over the past five years from 52% in FY06 to 78% in FY10, but remained relatively stable between FY08 (when Version 2.0 of the guidelines was launched) and FY10.

- Starbucks also increased its purchasing from C.A.F.E. Practices participants during this period from 77% of total purchases in FY08 to 84% in FY10.

- The number of applications receiving a non-compliant status decreased by 92% over the three years.

- There was a 112% increase in the number of applications achieving strategic status over the past five years.

Although the trends mentioned above were positive, there were a few data points showing room for improvement. For instance, although 30% of the applications re-verified between FY08 and FY10 achieved a higher approval status over time, 60% remained at the same level and 10% actually dropped to a lower status. Starbucks may wish to mine the data for these applications a bit more to determine what types of supplier-development strategies could assist in improving these percentages over time.
4. Farms

The role of the coffee farm is crucial, since farms are at the root of a functioning supply chain and their social and environmental impacts can be significant. The C. A. F. E. Practices program includes evaluation at the farm level in both the Generic and Smallholder Scorecards, using 179 indicators to verify performance of medium and large farms and 74 indicators to evaluate smallholder farms. The 74 smallholder indicators make up a subset of those included in the generic guidelines, with the exception of a single additional indicator to assess school attendance among children living on the farm (indicator SR-WC2. 6). An additional 38 indicators are used to audit Producer Support Organizations (PSOs) that provide assistance to small-farm applications.

The indicators assess crucial elements for promoting social responsibility, as well as coffee-growing performance on farms. At a minimum, the guidelines are designed to ensure that farms do not employ underage, forced or bonded labor and that they pay workers the legal minimum wage. The broader objective is to encourage the adoption of best practices over time to improve the working conditions and well-being of workers and to conserve natural resources and biodiversity across coffee-farming communities and improve long-term productivity through improved long-term farm viability. With data covering the span of three years, evaluating changes in performance, improvement in farm functioning and social advancement is possible. Using verification reports, we can determine the percentage of farms adopting the various best practices included in the C. A. F. E. Practices program and examine associated changes over time.

4.1. Methodology

Data for farm adoption rates of the best practices included in the Generic and Smallholder C. A. F. E. Practices scorecards are available from FY08 to FY10 and enable the tracking of performance trends over this period. For each indicator, verifiers determine whether it applies to the farm and when it does, assess compliance against the indicator. Thus, for each farm verified, verifiers can mark the indicator compliant, not compliant or not applicable, based on written evidence provided for each farm visited. Using data from the verification reports, we calculated compliance rates based on the percentage of farms in compliance relative to the population for which either a comply or not-comply determination was provided by the verifier.

Applications including small- and medium-sized farms undergo group verification in which verifiers visit a stratified sample of farms and prepare verification reports for each sampled farm. This sampling method also applies to large-sized farms in most applications from Brazil. For those applications including small and/or medium farms (and applicable applications in Brazil) we extrapolated the results of the farms verified to the population within that application. In all countries other than Brazil, all large farms are verified, so extrapolation is not necessary.

We analyzed the farm data at the global and country levels in order to get a sense of where compliance rates are increasing or decreasing within the social and environmental sections of the scorecard. While it is possible to analyze compliance rates for each of the 179 social responsibility and coffee-growing indicators, this analysis focuses on a subset of those identified as the most relevant for ensuring social well-being of farmers and workers, and for conserving natural resources and the broader environment and improving overall health at the farm level. This section presents the findings of the global analysis and considers basic observations based on trends seen across FY08, FY09 and FY10. While three years may not present enough time to view extensive trends, the data provided ample room for strong analysis, such that recommendations for improvement are possible.

4.1.1. General Participation

- Number of farms participating per year
- Number of workers employed by farms
- Number of coffee hectares
- Geographic distribution of farms by country and farm size
In FY10, 103,521 farms underwent verification in the C. A. F. E. Practices program, a sharp decrease from the 169,209 farms in FY09 and just under 30% lower than FY08 when 140,973 farms participated. (See Table 6.) The decrease occurred irrespective of farm size, given that the participation decline was relatively consistent across all farms. The distribution of farms among small, medium and large remained consistent, with small farms making up more than 98% of all farms for the third year in a row. In total, these farms represented 479,309 hectares, over two-thirds of which were managed by small farms.

<table>
<thead>
<tr>
<th>Farm Size</th>
<th>Farm Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
</tr>
<tr>
<td>Small</td>
<td>139,513</td>
</tr>
<tr>
<td>Medium</td>
<td>1,048</td>
</tr>
<tr>
<td>Large</td>
<td>412</td>
</tr>
<tr>
<td>All</td>
<td>140,973</td>
</tr>
</tbody>
</table>

Table 6: Relative Participation of Small, Medium and Large Farms

These farms provided more than 800,000 workers with full-time, part-time, or temporary employment in FY10 and just over 1.1 million in FY09. (See Table 7.) The majority of employment was based on the need for temporary workers on small farms, presumably during the harvest period. Farms also employed more than 30,000 full-time, permanent workers in FY10, the majority of whom worked on large farms. This is fairly consistent with the worker counts over all three analysis years. Owing to the fact that the populations assessed in each year are mostly distinct, nearly three million workers were impacted over the three-year assessment period and the reach of the C. A. F. E. Practices program is even greater, considering active participants not re-verified during the assessment period.

<table>
<thead>
<tr>
<th>Worker Type</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
<td>FY09</td>
<td>FY10</td>
<td>FY08</td>
</tr>
<tr>
<td>Full-Time</td>
<td>18,815</td>
<td>4,497</td>
<td>10,466</td>
<td>2,491</td>
</tr>
<tr>
<td>Part-Time</td>
<td>26,015</td>
<td>1,591</td>
<td>5,524</td>
<td>34,626</td>
</tr>
<tr>
<td>Temporary</td>
<td>775,795</td>
<td>991,085</td>
<td>588,966</td>
<td>44,611</td>
</tr>
<tr>
<td>Total</td>
<td>820,625</td>
<td>997,173</td>
<td>604,956</td>
<td>81,726</td>
</tr>
</tbody>
</table>

Table 7: Number and Type of Farm Workers, by Farm Size and Year, FY08-FY10

Across the three years, there was some variation in the number of workers employed by farms verified across all farm sizes. These figures, however, should be expected to vary year by year, given the distinct populations the figures are drawn from. The number of full-time workers employed by large farms verified for FY09 and FY10 grew significantly compared with FY08. Medium farms employed significantly more temporary workers in FY10 (131,332) than in any other fiscal year (44,611 in FY08 and 33,551 in FY09). Conversely, small farms employed fewer temporary workers in FY10 (588,966) than in any other fiscal year (775,595 in FY08 and 991,085 in FY09).

4.2. Social Responsibility – Farms

Within C. A. F. E. Practices, farms are verified against a set of guidelines that examine working conditions and hiring practices. Monitoring compliance rates for these indicators over time can help gauge how farms treat workers and identify any areas where additional focus may be required to drive continuous improvement. By paying competitive worker wages and benefits that meet or exceed legal standards and providing improved access to education, medical care and other benefits over time, farms can demonstrate a commitment to improving the livelihoods of workers. In addition, farms can make investments that improve worker wages, living conditions and the quality of the education and medical care received. The Social Responsibility indicators are designed to provide assurance that minimum performance standards are met, that the most egregious practices are not part of the Starbucks coffee supply chain and to encourage the further adoption of better practices over time.

Although there are 71 indicators in the Generic Evaluation Guidelines that focus on social responsibility, only 28 of these are also used to monitor conditions on small farms. Compliance rates for all 71 indicators have been tracked for the period of FY08 to FY10 in order to examine rates of change and identify areas of improvement and/or where change can be beneficial.
4.2.1. Compliance with Zero-tolerance Indicators

Starbucks deems a set of indicators as “zero tolerance” and these indicators serve as minimum requirements for selling coffee through the program. Examining where non-compliance exists within zero-tolerance indicators can aid in identifying areas of improvement. These zero-tolerance indicators look at payment of minimum wage, employment of children, forced and/or bonded labor and discrimination.

In addition to extrapolated rates of compliance considered elsewhere in the farm-level analysis, we examine the incidence of zero-tolerance failures within the sampled set alone in greater detail. Among nearly 3,000 sampled farms in FY09, 63 zero-tolerance failures were found on 50 farms, representing a failure rate of 1.7% among sampled farms. This is similar to the failure rate in FY10, where among more than 4,500 sampled farms, 99 failures were found on 75 farms, representing a failure rate of 1.6% among sampled farms. Both rates represent a decrease in failures compared to the FY08 rate of 3.1%, where 207 failures were found on 174 farms among more than 5,500 sampled.

Among more than 4,500 farms verified for FY10 (un-extrapolated), just 15 farms, or 0.3%, failed to comply with the minimum-wage indicator for full-time workers. This was a slight increase from the 11 farms in FY09, but a decrease from the FY09 failure rate of 0.4%. (See Table 8.)

Between FY09 and FY10, failure to comply with zero-tolerance indicators has largely dissipated, aside from the few instances where countries are just beginning to participate in the program or have struggled to comply with C.A.F.E. Practices overall. See country dashboards for further detail at the country level.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP1.1</td>
<td>51</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>SR-HP1.2</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SR-HP1.3</td>
<td>111</td>
<td>36</td>
<td>46</td>
</tr>
<tr>
<td>SR-HP4.1</td>
<td>12</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>SR-HP4.2</td>
<td>20</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>SR-HP4.3</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SR-HP4.4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Zero-tolerance Incidents</strong></td>
<td><strong>207</strong></td>
<td><strong>63</strong></td>
<td><strong>99</strong></td>
</tr>
</tbody>
</table>

Table 8: Zero-tolerance Incidents Among Sampled (Un-extrapolated) Farms, FY08-FY10

Non-compliance with the zero tolerance indicators result in less coffee eligible for purchase through the program – either for entire applications receiving a non-compliant status, or for the proportion of farms in a sampled application failing to comply with a zero tolerance indicator. All non-compliant applications during the period analyzed were due to farm level non-compliance with one or more of the zero tolerance indicators. The trends from FY06 to FY10 show a significant decline in the amount of coffee not eligible for purchase through the program due to non-compliant status. (See Table 9.) The volume of coffee produced by applications (or portions of applications) that have failed to comply with the minimum requirements of the program and is therefore not eligible for purchase is tracked as “green coffee deductions.” These deductions can be due to the failure of an entire application or to the failure of a percentage of the farms in an application failing to meet the zero-tolerance indicators. Beginning in FY08, the majority of the deductions were from applications in which a portion of the sample failed to meet the zero-tolerance requirements rather than entire applications being ineligible for purchase through the program.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Text</th>
<th>Farm Size</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP1. 1</td>
<td><strong>ZT:</strong> All full-time workers are paid the nationally or regionally established minimum wage. In regions where such minimum wages have not been set, all full-time workers are paid the local industry average. If workers are paid by production, wages meet the above requirements.</td>
<td>Small</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>82%</td>
</tr>
<tr>
<td>SR-HP1. 2</td>
<td><strong>ZT:</strong> All part-time workers are paid the nationally or regionally established minimum wage. In regions where such minimum wages have not been set, all part-time workers are paid the local industry average. If workers are paid by production, wages meet the above requirements.</td>
<td>Small</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>100%</td>
</tr>
<tr>
<td>SR-HP1. 3</td>
<td><strong>ZT:</strong> All temporary/seasonal workers are paid the nationally or regionally established minimum wage. In regions where minimum wages for temporary workers have not been set, all temporary/seasonal workers are paid the local industry average. If workers are paid by production, compensation meets the above requirements.</td>
<td>Small</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>95%</td>
</tr>
</tbody>
</table>

Table 10a: Percentage of Farms Complying with Zero-tolerance Indicators by Farm Size, FY08-FY10

4.2.2. Compliance with Minimum Labor Standards

- Number of farms with instances of child labor
- Number of farms with instances of forced or bonded labor
- Number of farms failing to pay the minimum wage to workers

Examining the zero-tolerance indicators at a global scale, extrapolated to the entire population, for all three years, 100% of farms did not employ children under the age of 14, nor did they use forced or bonded labor. *(See Table 10b.)* Additionally, of those farms that did employ minors over the age of 14, but under the age of 18 in FY10, 98% ensured that employment did not conflict with education. This is consistent with FY08 although in FY09, 100% of all farms were in compliance.
Ensuring that workers receive the legally established minimum wage is a crucial first step to ensuring that farm workers are able to maintain a healthy and comfortable lifestyle. Compliance with this set of indicators has generally hovered around 95-100% over the last three years despite farm size, although in FY08, small farms had only 80% compliance for full-time employees. Rates of compliance for small farms have increased to nearly 100% for full-time employees and in FY10, 99% of small farms were paying workers minimum wage. For those countries with non-compliant small farms in this category in FY08 (including Rwanda, Papua New Guinea, Nicaragua, Guatemala, Colombia and Costa Rica) compliance rates have increased to nearly 100% between FY08 and FY10.

4. 2. 3. Worker Compensation

- Number of workers receiving the minimum wage
- Number of workers paid above minimum wage
- Percentage of farms paying overtime at or above the legal minimum requirement

The rate of compliance with paying workers minimum wage was quite high across all sizes of farms in FY09 and FY10. (See Figure 11) In FY09, 872,246 workers were paid the minimum wage while 641,204 workers across all sizes of farms received above the minimum wage. In FY10, 713,397 workers were paid minimum wage and 427,910 were paid above minimum wage. Overall, the number of workers benefitting from this practice in each year has fallen since FY08 when over 996,500 workers received minimum wage and more than 785,000 were paid more than minimum wage, though this is due mostly to the variation in the number of workers employed by participants in a given year as populations of participants change from year to year.

On large farms, just 42% of farms paid full-time workers above minimum wage, but this increased to 67% in FY10. Seventy-nine percent of small farms, that mostly employ temporary and seasonal workers, paid these workers above the minimum wage in FY09 and this decreased slightly to 72% in FY10. Medium farms, that employ both full-time and temporary workers, paid those workers above minimum wage at a rate of at least 45% in FY09 and this increased to a rate of 70% or better in FY10.
Figure 11: Percentage of Farms Paying More Than the Minimum Wage, by Worker Type (All Farm Sizes), FY08-FY10

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Text</th>
<th>Farm Size</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP1.11</td>
<td>All full-time workers are paid more than the nationally or regionally established minimum wage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>FY08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>FY08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY10</td>
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<tr>
<td></td>
<td></td>
<td>Large</td>
<td>FY08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
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<td></td>
<td></td>
<td></td>
<td>FY10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>FY08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY10</td>
</tr>
<tr>
<td>SR-HP1.12</td>
<td>All part-time workers are paid more than the nationally or regionally established minimum wage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>FY08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>FY08</td>
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<td>FY09</td>
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<tr>
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<td>FY10</td>
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<tr>
<td></td>
<td></td>
<td>Large</td>
<td>FY08</td>
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<td>FY09</td>
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<td>FY10</td>
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<tr>
<td></td>
<td></td>
<td>All</td>
<td>FY08</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY10</td>
</tr>
<tr>
<td>SR-HP1.13</td>
<td>All temporary/seasonal workers are paid more than the nationally or regionally established minimum wage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>FY08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>FY08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY09</td>
</tr>
<tr>
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<td></td>
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<td>FY10</td>
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<tr>
<td></td>
<td></td>
<td>Large</td>
<td>FY08</td>
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<td></td>
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<td>FY09</td>
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<td>FY10</td>
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<td></td>
<td></td>
<td>All</td>
<td>FY08</td>
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<td></td>
<td>FY09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FY10</td>
</tr>
</tbody>
</table>

Table 11: Workers Paid Above Minimum Wage, FY08-FY10

4. 2. 4. Worker Access to Benefits

- Number of workers receiving legally mandated benefits
- Number of full-time farm workers receiving pension plans that exceed the national standard
- Number of workers receiving paid sick leave
- Number of workers receiving paid vacation

Legally mandated benefits: The percentage of farms providing workers legally mandated benefits fell across all farms between FY08 and FY10. (See Table 12.) In FY08, 82% of all farms provided full-time workers with legally mandated benefits. This number fell to 78% in FY10, but rose slightly to 90% in FY09. The actual number of workers receiving legally mandated benefits rose from 142,143 in FY09 to 173,884 in FY10, mostly due to the larger number of workers associated with the FY09 applications. Medium-sized farms had the greatest decrease, falling from 95% in FY08 to 63% in FY10. For part-time workers, the rates fell from 100% in FY08 to 65% in FY10. Large farms did increase from 98% in FY08 to 100% compliance in FY10. Across all farm sizes, the number of temporary or seasonal
workers receiving legally mandated benefits fell between FY08 and FY10. On medium-sized farms, the percentage of compliance with this indicator fell by half.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Text</th>
<th>Farm Size</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FY08</td>
<td>FY09</td>
</tr>
<tr>
<td>SR-HP1. 6</td>
<td>CR: If national legally mandated benefits are required for full-time workers, then these are paid by employer</td>
<td>Small</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>82%</td>
</tr>
<tr>
<td>SR-HP1. 7</td>
<td>CR: If national legally mandated benefits are required for part-time workers, then these are paid by employer</td>
<td>Small</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>100%</td>
</tr>
<tr>
<td>SR-HP1. 8</td>
<td>CR: If national legally mandated benefits are required for temporary workers, then these are paid by employer</td>
<td>Small</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>95%</td>
</tr>
</tbody>
</table>

Table 12: Percentage of Farms that Pay of National Legally Mandated Benefits to Workers

Pension plans that exceed national standards: Over time, employers have scored low on providing workers with pension plans that exceed national standards. Only 11% of large farms and 20% of medium-sized farms offered this benefit in FY10. This was an increase from FY09 when 9% and 7% of medium and large farms, respectively, offered this benefit. FY08 saw the highest rates of compliance with 21% and 26% compliance among medium and large farms respectively. Small farms did not report on this indicator.

Paid sick leave: Similar to the pension benefit, sick leave is only verified on medium and large farms. C. A. F. E. Practices evaluates sick leave benefits among full-time workers as well as all workers (which includes part-time and temporary or seasonal workers). From FY08 to FY10 around 85-90% of medium and large farms provided paid sick leave to its full-time or permanent workers. When taking into account part-time and temporary workers, only about 47-50% of the time was paid sick leave, paid for by employers. This was true throughout the three years and on both medium and large farms.

Annual leave (paid vacation): Medium and large farms providing vacation time of at least 10 days per year employed 10,792 full-time workers in FY08 which was equivalent to 71% of all workers on medium-sized farms and 82% on large farms. By FY10, these numbers had increased and 90% of large farms (and 75% of medium farms) provided this benefit to its full-time workers. Percentage compliance in FY09 was a bit higher than both FY08 and FY10 with 86% of medium farms offering this benefit and 95% of large farms. Overall, in FY10 81% of all farms provided paid vacation to its full-time workers, down from 90% in FY09, but up from 75% in FY08.

4.2.5 Worker Living Conditions

- Number of farms that provided habitable dwellings to workers
- Number of workers with access to potable water

Habitable dwellings: In FY10, 97% of all farms provided habitable housing to their workers. Small farms made up the bulk of this number, with 94% of compliant farms within the small-farm category. This is compared to compliance rates of 98% in FY09 and 89% in FY08. Compliance rates were high across all sizes of farms in FY10, with small farms complying at a rate of 98%, medium farms at 96% and large farms at 94% in FY10. In FY08, compliance rates hovered around 90%. Thus, rates of compliance have increased across the board on all sizes of farms.
Eighty percent of all farms placed their worker housing at a safe distance from productive areas and had agrochemical storage facilities sufficient to prevent agrochemical exposure in FY10. This was up from 69% in FY08 and 74% in FY09. All farms, regardless of size, complied approximately 80% of the time with this C. A. F. E. Practices indicator.

**Potable water:** Of the farms verified for FY10, 98% had worker access to potable water, up from 94% in FY08. (See Table 13.) Nearly 99% of these farms were small farms. Compliance rates increased among small and medium-sized farms between FY08 and FY10, from 94% to 99% for small farms and 79% to 86% for medium-sized farms. Large-sized farms, however, saw a decrease in compliance between the three years from 89% to 79%.

<table>
<thead>
<tr>
<th>Size</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis FY</td>
<td>FY08</td>
<td>FY09</td>
<td>FY10</td>
<td>FY08</td>
</tr>
<tr>
<td># of Farms in Compliance</td>
<td>84,370</td>
<td>96,294</td>
<td>67,213</td>
<td>756</td>
</tr>
<tr>
<td># of Farms Non-Compliant</td>
<td>5,324</td>
<td>2,775</td>
<td>922</td>
<td>204</td>
</tr>
<tr>
<td># of Farms N/A</td>
<td>67,877</td>
<td>34,119</td>
<td>242</td>
<td>53</td>
</tr>
</tbody>
</table>

**Table 13: Number of Farms Providing Potable Water to Workers**

There are some instances of verifiers stating this indicator is not applicable (N/A) for a farm. This should only occur on small, family-run farms that do not employ workers, but some verifiers marked this on medium and large farms. Thus, this is one indicator for which verifiers may require further training and guidance.

### 4.2.6. Access to Education

- Percentage of small farms where children of legal school age attend school where available and do not work during school hours
- Percentage of farms with insufficient access to education that provide primary or secondary education to children of workers living on site
- Percentage of farms with convenient access to education supporting schools through in-kind or financial support
- Percentage of farms providing direct incentives for education

**Children living on small farms:** Education benefits may be easier to come by on medium- to larger-sized farms. Thus, in order to examine whether education benefits are available on small farms, the C. A. F. E. Practices program includes an indicator to verify whether smaller farms provide school-age children with the opportunity to attend school. The same indicator also assures that children are not working on coffee farms during school hours. In each year between FY08 and FY10, every farm verified had 100% compliance with this indicator. In other words, every small farm analyzed ensures that children of legal school age attend school where available and do not work on those farms. Based on a recommendation made in the FY08 report, Starbucks has now started collecting data on the number of children living on farms in order to understand the number of children impacted by this indicator.

**Children living on medium and large farms:** Several indicators are included in the C. A. F. E Practices program in order to examine progress made in providing increased access to education. By examining rates of compliance, it is possible to understand where primary and secondary school education is available to children, versus where that level of schooling is simply unavailable. These reporting indicators are only used in verifying medium and large-sized farms. Where formal education programs are unavailable, many farms provide some level of primary or secondary schooling. For example, in FY10, 17% of medium and large farms were in areas that lacked sufficient access to primary schools, but 97% managed to provide on-site access to primary educational instruction, facilities and materials that meet national requirements for the children in their community. This rate has stayed constant since FY08 at 97%. With regards to secondary education, 86% of medium and large farms provide on-site access to
secondary educational instruction, facilities and materials that meet national requirements to those children who live on site and where formal secondary education is unavailable. (See Table 14.) This rate has stayed relatively constant over the three years, at 84% in FY08 and 83% in FY09. The total number of farms reporting on this indicator was relatively small, signifying that most workers who lived on farms were in close proximity to secondary schools. In FY08, around 500 farms reported. That number grew to just over 2,000 in FY09 and fell to just over 1,500 in FY10.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Text</th>
<th>Farm Size</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-WC2. 1</td>
<td>CR: Where there is insufficient access to public education, schoolchildren (of primary school age) of workers who live on-site have access to primary educational instruction, facilities and materials that meet national requirements.</td>
<td>Small</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>97%</td>
</tr>
<tr>
<td>SR-WC2. 2</td>
<td>Where there is insufficient access to public education, school children (of secondary school age) of workers who live on-site have access to secondary educational instruction, facilities and materials that meet national requirements.</td>
<td>Small</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>82%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>84%</td>
</tr>
</tbody>
</table>

Table 14: Percentage of Medium and Large Farms Providing Primary and Secondary Education in Areas with Insufficient Access

In addition to filling this critical need for supplemental schooling, 48% of medium and large farms provided scholarships and other incentives for education to children in FY10. This represents a slight decline from the 49% that complied in FY08, but an increase from the 14% complying in FY08. Finally, in regions where public schools are available, 54% of medium and large farms provided either in-kind or financial support to these facilities in FY10, a rate that is in line with the 58% of farms that did so in FY08 (although down quite a bit from the 70% compliance figure from FY09).

4. 2. 7. Access to Medical Care

- Percentage of farms supporting local medical facilities through in-kind or financial support
- Percentage of farms offsetting the cost of health services for workers

Medium and large farms are evaluated on whether they provide access to or financial support of medical care and facilities through the C. A. F. E. Practices program where there is convenient access to public medical care. In FY10, 44% of medium and large farms provided in-kind or financial support to the operation of local medical facilities for the convenience of their workers. This was down from the 71% recorded in FY09, but a 10-point increase from FY08 (34%).

In addition to supporting local medical facilities and other medical care providers through financial assistance, some farms subsidize health care costs for their workers. In FY10, 87% of full-time workers (and 71% of all workers, which includes part-time and temporary/seasonal workers) were provided with offsets to health care costs. (See Table 15.) This was generally in line with the rate of reporting in FY08 (82% for full-time workers, 71% for all workers) and FY09 (85% for full-time workers and 77% for all workers). The total number of farms reporting on the health care offset indicators was relatively low, hovering between 1,000-2,000 globally in all three reporting years.
Where there is convenient access to public medical care, employer supports these facilities either through in-kind donations or financial support.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Text</th>
<th>Farm Size</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-WC3.3</td>
<td>Where there is convenient access to public medical care, employer supports these facilities either through in-kind donations or financial support.</td>
<td>Small</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>34%</td>
</tr>
<tr>
<td>SR-WC3.5</td>
<td>Employer offsets the cost of health services for all permanent/full-time workers.</td>
<td>Small</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>88%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>82%</td>
</tr>
<tr>
<td>SR-WC3.6</td>
<td>Employer offsets the cost of health services for all workers.</td>
<td>Small</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>71%</td>
</tr>
</tbody>
</table>

Table 15: Percentage of Medium and Large Farms Offsetting Health Care Costs for Workers

### 4.2.8. Social Responsibility Conclusions and Recommendations: Farms

The number of farms participating in the C. A. F. E. Practices program increased from over 140,000 farms in FY08 to nearly 170,000 in FY09 and then decreased to a low of just over 100,000 in FY10, and the number of workers employed on these farms varied in a similar pattern. Farms were quite successful in ensuring their workers were provided with substantive wages and benefits, as well as other provisions including education and health care. Compliance with zero-tolerance indicators, for example, was at 100% almost across the board and the instances of payment at minimum wage or above has generally held constant or increased. Those countries that had non-compliant small farms in the zero-tolerance indicators category in FY08 (including Rwanda, Papua New Guinea, Nicaragua, Guatemala, Colombia and Costa Rica) saw compliance rates skyrocket to 100% by FY10. That change is a testament to the importance placed on ensuring farms under the C. A. F. E. Practices program are doing right by their worker communities.

There are definitely opportunities for improvement, however. For example, the provision of legally mandated benefits fell to 78% in FY10 from 90% in FY09 and part-time employees, particularly, bore the brunt of that change. Farms provided part-time employees with legally mandated benefits 100% of the time in FY08 yet by FY10, farms only reported 65% compliance within that indicator. Farms that provide pension plans that exceed national standards are all still limited, and rates of compliance were below 20% in both FY09 and FY10 across all farms, whereas in FY08, the rates were within the low-to-mid-20s. As farms look to improve their participation with the C. A. F. E. Practices program, they may want to consider monitoring national averages and positioning their benefit packages so that those farms under the program meet or exceed national standards.

Other benefits, including sick leave and annual leave (vacation), were not consistent across farm geographies or sizes. There wasn’t much of a trend among those benefit options indicators. A good majority of farms did ensure that workers had access to habitable dwellings and potable water, almost 100% of the time. Ensuring that workers were not minors was reported at a high rate and education benefits were very high, as most farms provided at least primary-level education for their communities’ children if a school were not already in the vicinity. Only medium and large farms were assessed on their provision of secondary-school benefits and generally, farms reported in the 80% range on that indicator. Certainly 100% compliance with education indicators would be a tremendous feat for the program as it advances over time.

### 4.3. Coffee Growing – Environmental Responsibility

The C. A. F. E. Practices program relies on 108 indicators to verify the coffee-growing practices of its farms. All 108 apply to medium and large farms in the program, whereas the smallholder scorecard consists of only 44 of the 108 indicators. For applications that include small farms, 38 additional indicators are used to verify performance of the PSOs providing support services to the small-farm networks. The results of the PSO verifications are presented in Section 4.4 of this report.
Although data exists for all 108 of the coffee-growing environmental responsibility indicators, we have focused on key indicators identified as having significant potential to contribute to environmental conservation and mitigate risks to the environment from coffee growing on farms and enhance long term viability of the coffee farm. While none of these indicators are zero-tolerance indicators that farms must meet to be in the program, nine are criteria requirements that growers must meet to receive any points under that criteria section.

Across this suite of indicators applications had average scores ranging from 62% in FY07 (when this score was first calculated for applications) to 73% in FY10. While the average score can provide a general sense of overall performance, deeper analysis of individual indicators within the coffee-growing section of the verification reports can serve to identify areas where Starbucks might target training, technical assistance and/or other types of support for supplier development. This section presents a summary of the global results and trends for farms verified during the FY08-FY10 time period.

4.3. 1. Water and Soil Resource Conservation

- Percentage of farms maintaining buffer zones next to watercourses
- Percentage of farms using native woody vegetation to maintain watercourse buffer zones
- Number of farms managing steep slopes to control erosion
- Percentage of farms maintaining vegetative cover to reduce erosion

**Water resources:** A key focus of the water-resource conservation section of the C. A. F. E. Practices guidelines is the establishment of riparian zones to protect water bodies from sedimentation, nutrient runoff, agrochemical application and waste disposal. The seven indicators used to verify performance related to the establishment of riparian zones enable farms to show incremental progress according to the percentage of water bodies with riparian buffers, the width of the buffers and the percentage that contain native woody vegetation. The results show consistent rates of compliance across the three-year period for most of the indicators. For instance, the percentage of farms having 2m riparian zones for at least 25% of water bodies ranged between 94% in FY08 to 99% in FY09. When the threshold is raised to 50% of water bodies the range moved between 76% in FY09 to 88% in FY10, and when raised to include all water bodies the range lowered to 59-66%, with the low end of the range in FY09 and the peak in FY10. (See Table 16.) Large farms tended to have better performance across the years. The only exception among the 2m riparian zone indicator set occurred in FY09, when 98% of medium farms had buffers on 50% of water bodies which slightly edged out large farms at 97%. In most cases, there was no clear trend across the three years, with performance in FY09 either above or below that of both FY08 and FY10. One exception to this is the steady increase in compliance among small farms having 2m buffer zones along at least 50% of all water bodies on the farm.

When the indicator is expanded to include both permanent and seasonal/intermittent water bodies, compliance rates drop roughly 20-30 percentage points across all farm sizes, although in general, nearly half to just over half of farms had buffer zones for all seasonal/intermittent water bodies. This indicator does not apply to small farms, however, nor does the indicator asking whether farms had 5m buffer zones protecting all waterways on the farm.

The range of compliance rates across the years for the percentage of farms protecting all waterways with 5m buffer zones varied greatly, with 37% of farms complying with this practice in FY08, 46% complying in FY10, but 71% in compliance during FY09. (See Figure 12.) Once again, large farms tended to outperform medium farms across nearly all of the indicators for each of the three years.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Farm Size</th>
<th>Year</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG-WR1. 1</td>
<td>25% of water bodies (2m)</td>
<td>Small</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>92%</td>
<td>99%</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>98%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>94%</td>
<td>99%</td>
<td>97%</td>
</tr>
<tr>
<td>CG-WR1. 2</td>
<td>50% of water bodies (2m)</td>
<td>Small</td>
<td>80%</td>
<td>75%</td>
<td>88%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>85%</td>
<td>98%</td>
<td>91%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>89%</td>
<td>97%</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>80%</td>
<td>76%</td>
<td>88%</td>
</tr>
<tr>
<td>CG-WR1. 3</td>
<td>all water bodies (2m)</td>
<td>Small</td>
<td>62%</td>
<td>58%</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>66%</td>
<td>79%</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>72%</td>
<td>87%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>62%</td>
<td>59%</td>
<td>66%</td>
</tr>
<tr>
<td>CG-WR1. 4</td>
<td>50% of seasonal/intermittent water bodies (2m)</td>
<td>Small</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>65%</td>
<td>82%</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>72%</td>
<td>76%</td>
<td>84%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>67%</td>
<td>80%</td>
<td>77%</td>
</tr>
<tr>
<td>CG-WR1. 5</td>
<td>all seasonal/intermittent water bodies (2m)</td>
<td>Small</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>44%</td>
<td>54%</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>46%</td>
<td>55%</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>45%</td>
<td>54%</td>
<td>44%</td>
</tr>
<tr>
<td>CG-WR1. 6</td>
<td>50% of all waterways (5m)</td>
<td>Small</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>53%</td>
<td>92%</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>60%</td>
<td>95%</td>
<td>86%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>55%</td>
<td>93%</td>
<td>76%</td>
</tr>
<tr>
<td>CG-WR1. 7</td>
<td>all waterways (5m)</td>
<td>Small</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium</td>
<td>35%</td>
<td>69%</td>
<td>39%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>40%</td>
<td>75%</td>
<td>61%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>37%</td>
<td>71%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Table 16: Riparian Buffer Indicator Results, FY08-FY10

Figure 12: Percentage of Total Farms with Riparian Buffer Zones, FY08-FY10
Over half of the riparian buffer zones protecting water bodies on farms were composed of native woody vegetation, with the highest rate of 61% occurring in FY10. (See Table 17.) This is one indicator where small farms had consistently higher compliance rates than either medium or large farms. The lowest level of compliance (28%) occurred among large farms verified for FY09. These large farms also had low compliance rates for the indicator verifying whether they had restoration plans for the riparian zones based on re-establishing native vegetation (33%), although this was higher than the percentage of medium farms having such plans. Performance in FY09 was either above or below that of the other two years for this entire set of indicators.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Farm Size</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
<td>FY09</td>
</tr>
</tbody>
</table>

Table 17: Percentage of Farms with Buffer Zones Comprised of Native Vegetation, FY08-FY10

Most farms participating in the program took precautions to protect water resources from agrochemical contamination by not applying chemicals within 10m of any permanent water body. FY09 saw the highest rate of compliance at 91% while FY08 had the lowest with 77%. Small farms tended to have the highest compliance rates for these indicators, although in FY09 small and large farms had equally high rates of 91%. Medium farms appeared to struggle the most with this indicator, but still had compliance rates of 60% or above for each of the three years. As with many of the other water-resource indicators, compliance rates in FY09 were higher than those in either FY08 or FY10.

Among medium and large farms applying nematicides, the vast majority took precautions to protect water bodies when doing so and did not apply them within 20m of permanent water bodies. (See Table 18.) FY09 had particularly high rates of compliance with 98% of large farms and 99% of medium farms adopting this practice. Performance in the other two years was also extremely high with total farm compliance rates of 94% in FY08 and 96% in FY10.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Farm Size</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
<td>FY09</td>
</tr>
</tbody>
</table>

Table 18: Percentage of Farms Protecting Water Bodies from Agrochemicals, FY08-FY10

Soil resources: The soil resources section of the scorecard contains a substantial number of indicators that apply to small, medium and large farms, with the exception of two indicators. These indicators focus on protecting steep slopes to prevent runoff and using leguminous trees and cover crops in lieu of chemical fertilizers to maintain soil fertility.
The set of indicators that verify implementation of practices to protect slopes looks at slopes ranging from 10-20%, 20-30% and over 30%, and at the percentage of these slopes that are protected, with additional expectations for the most extreme slopes (greater than 60%). As the slope increases, additional erosion controls are required. In addition, there is one indicator that looks at conservation of areas at extreme risk of landslides. According to reporting rates for these indicators, most large and medium farms had slopes of over 10%, but the percentage of small farms with these slopes varied, with only half having them in FY09. Most farms were protecting at least 50% of these slopes through the use of shade trees and/or cover crops, but when the indicator extends to include all of these slopes, the rates drop off significantly (See Figure 13.) This was especially the case for small farms. Compliance rates did not vary significantly across the years for the protection of 25% and 50% of slopes of between 10% and 20%.

![Figure 13: Percentage of Farms Protecting Slopes Between 10%-20%, FY08-FY10](image)

When the indicator extended to all slopes of 20-30%, however, there was more variation for small and medium farms. (See Figure 14.) For instance, small farms had 47% compliance in FY09, down from 57% in FY10, but both were down from 71% in FY08. Compliance rates for large farms remained relatively constant over the years across all three categories.

![Figure 14: Percentage of Farms Protecting Slopes of Between 20-30%, FY08-FY10](image)

For slopes over 30%, medium and large farms tended to protect at least 50% of them from erosion. (See Figure 15.) Small farms also performed well in FY08 and FY10, but those verified for FY09 had significantly lower compliance rates. For instance, only 58% protected 25% of these slopes in FY08 and the rate dropped to 49% when the

---

8 The wording of the thresholds for these indicators changed between the FY08 and FY09 verification periods. In FY08 the indicators applied to farms having slopes of at least 10%, at least 20% and at least 30%. Although there is some variation, we still compared results across the three years of verifications.
threshold was raised to 50% of these slopes. Medium farms showed increasing rates of compliance across all three years for each of these indicators.

Figure 15: Percentage of Farms Protecting Slopes Over 30%, FY08-FY10

Finally, over half of the large and medium farms with areas at extreme risk for landslides had taken these lands out of production and restored them with native vegetation if practical in FY08 and FY09. The figure fell to slightly less than half of farms in FY10, at 46% across both farm types, but large farms had only 38% compliance with this practice in that year. This indicator does not apply to small farms.

Figure 16: Percentage of Farms Using Cover Crops, FY08-FY10

Organic matter and leguminous trees: Similarly to the erosion prevention indicators, those used to assess the rate of farmer adoption of practices designed to improve or maintain soil fertility also look at whether the practice extends to at least 25% of the productive area, 50% of the production area or the entire productive area. The first set looks at whether the productive area is covered by a layer of organic matter composed of dead and decaying biomass and/or nitrogen-fixing cover crops. The data shows that medium and large farms tended to apply these practices at higher rates than small farms. (See Figure 16.) All medium farms had at least 25% of the productive area under this practice across all three years and large farms had 100% compliance for FY09 and FY10 and 99% compliance in FY08. Rates for small farms ranged from 81% in FY09 to 97% in FY08. When extended to include the entire productive area of the farm, rates tended to drop significantly. For instance, in FY09 81% of small farms had cover crops or organic matter on at least 25% of the productive area, but only 23% were applying these practices across the entire productive area. This figure in FY09 was quite a bit lower than the rate of compliance for small farms in FY08 and FY10. Medium and
large farms were much more likely to have adopted these practices across the entire productive area of their farms, and large farms saw the compliance rates increase over time for meeting this threshold.

Another practice verified on farms participating in the program is the use of leguminous trees to fix nitrogen in the soils to improve soil health across 25%, 50% or 100% of the productive area. (See Figure 17) In most cases, farms verified for FY08 had higher adoption rates for this practice than those verified for later years. The only exception was in FY10 when 74% of small farms had nitrogen-fixing trees on at least 25% of the productive area, compared to 72% in FY08 and 50% in FY09. Small farms had the lowest compliance rates across all three of the indicators for leguminous trees when compared to medium and large farms. This has some implications for PSOs and the services they are providing to small farms in their respective networks to assist in identifying sources of shade trees. Large farms verified for FY09 had significantly lower adoption of leguminous shade than those verified for either of the other two years, with farms in Brazil making up the bulk of this finding.

4.3.2 Appropriate Chemical Use on Farms

- Percentage of farms not using WHO Type 1A and 1B chemicals
- Percentage of farms demonstrating a decrease in toxic load over time
- Percentage of farms using pesticides and/or herbicides only as a last resort
- Percentage of farms not using synthetic fertilizers (and number of hectares)
- Percentage of farms that are certified organic

The C. A. F. E. Practices program encourages the adoption of best practices to guide any chemical use on farms. This includes refraining from using the most toxic chemicals as identified by the World Health Organization (WHO), monitoring and reducing toxic load over time and using pesticides and herbicides only as a last resort. The program recognizes those farms that refrain from using synthetic fertilizers as well as those that have achieved organic certification, although that is not a pre-requisite for approval. This section provides a global overview of farm performance against these indicators.

WHO Type 1A and 1B chemicals: The overwhelming majority of farms did not use Type 1A or 1B chemicals, as identified by WHO. In FY08 and FY10, 98% of farms complied with this practice and in FY09 the figure was 99%. Small farms had the highest compliance rates for this indicator with figures that mirrored the total aggregate rates. Medium and large farms had lower levels of compliance in all three years. Medium farms performed the lowest in FY09 at 79% and the highest in FY08 with 92% of farms refraining from the use of these chemicals. Large farms
were more consistent in their performance with 85% adopting this practice in FY08 and FY09 and 84% in FY10. The continued use of these chemicals by 21% of medium farms in FY09 and 16% of large farms in FY10 means there is still significant room for improvement in phasing out these chemicals.

**Toxic load:** A relatively small proportion of medium and large farms monitored and recorded their toxic load in any particular year. Medium farms had the highest level of performance in FY10 at 12% and the lowest in FY09 with only 2% recording toxic loads. Large farms had slightly higher performance with 34% recording these in FY08 but a low of 4% in FY09. The percentage of medium and large farms showing a decrease in the toxic load of chemicals used over time was also rather low. The highest performance for medium farms was in FY10 at 25% and the lowest in FY09 when only 4% showed a decrease. Large farms outperformed medium ones only in FY08 when 28% decreased their toxic load.

**Pesticides:** The percentage of farms using pesticides only as a last resort showed an increase over time from 57% in FY08 to 83% in FY10. These rates reflected those of small farms participating in the program, given the large proportion of the population represented by farms of that size. For medium farms the compliance rates ranged from 23% in FY09 to 67% in FY10. Large farms had a slightly higher performance against this indicator with a range from 46% in FY09 to 83% in FY10.

**Herbicides:** A significant portion of the farms participating in C. A. F. E. Practices did not use herbicides to control ground vegetation/cover crops and only used them in spot applications to control aggressive weeds. In FY08 and FY10, small farms had the highest compliance rates for this indicator, but in FY09 medium and large farms both had 95% compliance rates versus 79% of small farms.

**Chemical fertilizers:** The overall percentage of farms that did not use synthetic fertilizers, or that were certified organic, dropped slightly across the three years from 51% in FY08 to 44% in FY10. This decline reflected the performance of small farms given the significant number of those farms when compared to medium or large farms participating in the program. This explains why rates for medium and large farms differed from the global averages for each year. Medium farms were less likely to have adopted this practice than small farms and their performance declined from 25% in FY08 to 10% in FY10. Large farms were the least likely to refrain from using synthetic fertilizers, with only 8% complying with this indicator in FY08, 2% complying in FY09 and 3% in FY10.

**Organic Production:** Organic production is not the objective of the C. A. F. E. Practices program; instead, the focus is on sustainable production of high-quality coffee. Still, a small percentage of farms participating in the program (4-10% in any given year) also had organic certification. This indicator is not used to verify small farms so data is only available for medium and large farms, and medium farms were more likely to have organic certification than large farms. In FY08 13% of the medium-sized farms verified through the program were certified organic. This fell to 12% in FY09 and 5% in FY10. Among large farms, 10% were certified organic producers in FY08, but this fell to 1% in FY09 and stayed at that level in FY10.

### 4. 3. 3. Biodiversity Conservation on Farms and Within the Broader Landscape

- Number of conservation hectares on participating farms (and percentage by farm size)
- Percentage of farms with shade cover on at least part of the farm
- Percentage of farms that have not cleared natural habitat since March 2004
- Percentage of farms that have established conservation set-asides.
- Percentage of farms managing areas of high ecological value

**Conservation hectares:** Conservation hectares represent areas where conservation is the primary objective of land management, although some coffee cultivation may take place there as well. Over the three years of verifications the number of hectares managed for conservation purposes stayed relatively stable at between 102,281 ha in FY08 and 108,632 ha in FY10, though due to the low level of re-verifications in the analysis period, this mostly represents a new set of conservation hectares each year. There was a small, steady increase in the number over the three years. (See Table 19.)
Table 19: Number of Conservation Hectares Managed by Participating Farms, FY08-FY10

<table>
<thead>
<tr>
<th>Farm Size</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>64,975</td>
<td>47,502</td>
<td>48,678</td>
</tr>
<tr>
<td>Medium</td>
<td>6,919</td>
<td>17,467</td>
<td>9,117</td>
</tr>
<tr>
<td>Large</td>
<td>30,387</td>
<td>41,070</td>
<td>50,837</td>
</tr>
<tr>
<td>All</td>
<td>102,281</td>
<td>106,039</td>
<td>108,632</td>
</tr>
</tbody>
</table>

Small and large farms managed the majority of these hectares across all three years. In FY08 and FY09, small farms as a whole had more hectares under conservation management than either medium or large farms. In FY10, however, large farms had 50,837 ha under conservation management, which was slightly more than the 48,678 managed by small farms. This drop in the proportion of conservation hectares managed by small farms may be due to the decrease in the number of small farms verified from FY08 to FY10, although the greatest number of large farms verified occurred in FY09 rather than in FY10.

Figure 18: Proportion of Conservation Hectares by Farm Size, FY08-FY10

Shade coffee systems: One indicator already noted in the soil resources section above looks at the percentage of farms having nitrogen-fixing trees on at least a portion of the productive area. According to that indicator, 50% of farms had at least 25% of the productive area under this type of shade in FY08 and this rose to 74% in FY10. Within the conserving biodiversity section of the scorecard, verifiers evaluate whether farms maintain a 10% shade canopy cover for productive and non-productive areas. On medium and large farms they also evaluate whether the farms have achieved a 40% shade canopy cover. Most farms had 10% shade canopy cover across the farm, with compliance rates of over 80% across all years and farm sizes, aside from that of small farms verified for FY09 when only 62% maintained this level of shade. (See Figure 19.) When the threshold is set at 40% shade canopy cover, rates of compliance were somewhat lower, especially in FY09 when only 8% of large farms and 25% of medium farms had this level of shade. This was significantly lower than performance for that indicator for the other two years.

In addition to the extent of shade cover on farms, the program also verifies the quality of the shade by looking at whether at least 75% of it is comprised of locally native species and/or that the canopy consists of at least 10 species known to provide benefits to conservation, and that there are two distinguishable canopy layers in the shade system. The latter indicator does not apply to small farms, however. In FY08 62% of farms had at least 75% of their shade comprised of native species and/or consisting of at least 10 species, but this figure dropped to 28% in FY09 and 44% in FY10. These figures represent the trend for small farms in particular, although FY09 was a low year for all three farm sizes. Medium farms performed the highest for this indicator in FY10 when 77% had this quality of shade cover. Large farms had the highest compliance in FY08 at 78%. Most farms with shade cover had shade consisting of at least two distinguishable canopy layers, with compliance rates ranging from 59% in FY08 to 64% in FY09.
Forest conversion: Nearly all farms that underwent C.A.F.E. Practices verification between FY08 and FY10 did not clear any natural forest for agricultural production after March 2004. Small farms had 100% compliance in FY08 and FY09, and 99% compliance in FY10. Neither medium nor large farms had all farms complying with this indicator in any of the three years, with medium farms having rates ranging from 96% in FY08 to 99% in FY09. Large farms had 99% compliance in FY08 and FY10 and 98% in FY09. These are significantly high rates similar to those for zero-tolerance indicators and may warrant consideration as such in future versions of the program. This indicator is a criteria requirement and therefore farms must comply with it to receive any points for this criteria set.

Of the medium and large farms that did convert habitat to coffee production, 90% ensured that these areas were not those of high ecological value and that there are areas of equivalent size set aside for conservation in FY08, 91% in FY09 and 86% in FY10. Thus, there is some clearing of natural habitat of ecological importance by farms participating in the program, although most farms did not do so. Large farms were the most likely to have cleared these important areas as compliance rates declined from 88% in FY08 to 79% in FY10. Medium farms also saw the lowest level of compliance in FY10, at 88%, compared to 93% in FY09 and 91% in FY08. This indicator is not used to verify small farms, so there is no data on whether these farms also cleared areas of high ecological value.

Most farms reported having some native trees, based on reporting rates for the indicator asking whether these are removed only when constituting a human hazard or significantly competing with coffee production. In FY09, 92% of farms reported on this indicator and this was the highest across all three years. The lowest level of reporting was in FY08, when only 79% of farms had native trees. Those farms that did have native trees did take steps to conserve them and not clear them except when they constituted a human hazard or significantly competed with coffee production. Medium farms saw 100% compliance in FY09 and large farms reported 100% compliance in both FY09 and FY10. The lowest compliance rates occurred among small farms, with 93% of farms following this best practice in FY09, 94% in FY08 and 98% in FY10. Still, compliance rates with this indicator were 93% or better across all farm sizes and fiscal years.

Conservation set-asides: The conservation indicators used to verify medium and large farms look at whether they have set aside 3% or 5% of their land for conservation, and over the three years a large portion had done so. The vast majority of the farms verified from FY08 to FY10 set aside 5% of their land for conservation. Large farms were more likely than medium ones to have set-asides, and in particular, those verified for FY09 when the compliance rate peaked at 95%. (See Figure 20.) Medium farms also had high levels of compliance with this indicator, with the lowest occurring in FY10 at 63% and the highest of 84% in FY09.

Areas of high ecological value: Medium and large farms are verified against a number of indicators related to the conservation of areas of high ecological value on the farm and the restoration of these values if they are completely lacking. The first indicator looks at whether the farm has undertaken an assessment to identify areas of high ecological value on the farm. Over half of the medium and large farms verified for FY08-FY10 had undertaken an assessment, with large farms more likely to have done so. This was especially the case in FY10 when 88% of large farms had done an assessment. For both medium and large farms, the percentage that had adopted this practice...
rose over time. Medium farms saw a rise from 50% in FY08 to 60% in FY10, whereas large farms had 61% compliant in FY08 compared to 88% in FY10.

Figure 20: Percentage of Farms with 3% and 5% Set-asides, FY08-FY10

Where areas of high ecological value have been identified, farms are to clearly define, protect and manage these with a conservation emphasis that maintains the value. Most medium and large farms were doing so, with compliance ranging from 66% in FY08 to 96% in FY09. There was also a positive trend towards more of these farms ensuring these areas remain protected from future development through the declaration of private reserves, conservation emphasis areas, or legal conservation easements, with 22% complying in FY08, 53% in FY09 and 56% in FY10. Large farms were slightly more likely to take this step than medium farms. If a farm had multiple areas of high ecological value, many of those verified for FY08 and FY10 were establishing corridors to connect these areas as compliance rates reached 59% and 76%, respectively. Large farms were more likely to establish corridors than medium farms. In FY09, less than half of the farms verified against this indicator had adopted this practice (37%).

A small percentage of the medium and large farms were completely lacking areas of high ecological value, as only 12% reported on the set of indicators that apply to farms with no areas of ecological value in FY08, 10% in FY09 and 30% in FY10. Medium farms were more likely to not have areas of high conservation value on their farms, especially in FY10 when 39% of farms reported on the indicator about needing a plan for restoring natural habitat due to the lack of such on the farm. For those farms where areas of high ecological value were not present, between 34% and 44% had plans for restoring natural habitat on the farm. Large farms were more likely to have these than medium farms. In addition, between 33% and 51% of these farms were implementing their restoration plans, with the highest rate occurring in FY10. Large farms were more likely to be implementing these plans in FY08 and FY09, but medium farms were more likely to be doing so in FY10. Medium farms also showed a steady increase in compliance over time as rates moved from 29% in FY08 to 33% in FY09 and 51% in FY10. Large farm rates peaked in FY08 at 53%, fell to 36% in FY09 and then rose to 49% in FY10.
4. 3. 4. Environmental Management Planning on Coffee Farms

- Percentage of farms with written environmental-management plans
- Percentage of farms with soil management plans
- Percentage of farms with integrated pest management plans
- Percentage of farms with wildlife management plans
- Percentage of farms with shade management plans
- Percentage of farms with monitoring programs in place

Across a range of key environmental issues the C. A. F. E. Practices program encourages medium and large farms to have plans and to be implementing these according to the time frame established within the plan. They are also encouraged to put in place monitoring programs to track farm activities and improvements in C. A. F. E. Practices over time. All of the indicators reported on in this section apply only to medium and large farms participating in the program, as planning for small-farm networks happens at the level of the PSO in most cases.

Environmental management plans: Over half (57%) of medium and large farms verified for FY08 had developed written environmental management plans, but this fell to just 19% in FY09 and 49% in FY10. FY10 had 17% of verifiers marking this indicator not applicable, versus none doing so in FY09. Thus, some additional training on when or if this indicator should ever be considered not applicable may be warranted. Over half of the farms were implementing the written management plans in FY08 and FY10, when compliance was at 64% and 52%, respectively. For FY09, the rate was only 23%, however. Large farms were slightly more likely to be implementing these plans in FY08 and FY10. Over half of the farms verified for FY08 and FY10 were also taking steps to update the management plans on an annual basis, whereas in FY09 the rate was less than a quarter of the farms. Again, large farms slightly outperformed medium ones in both FY08 and FY10.

Soil management plans: Across the three years, the majority of medium and large farms complied with the indicator used to verify if they had explicit soil management plans that include measures for controlling erosion. The highest rate occurred in FY09 when 81% of farms had such plans in place. In other years the rates were within the 61-68% range. Large farms saw a consistent increase in the percentage complying with this indicator over time, moving from 71% in FY08 to 72% in FY09 and 84% in FY10. Medium farms had their highest performance level in FY09 at 84% and the lowest in FY08 at 57%.

Integrated pest management (IPM) plans: Over half of the medium and large farms verified for FY08 and FY10 had IPM plans in place to manage pests and diseases, but only 45% did so in FY09. Large farms had higher compliance rates in FY08 and FY10 at 60% and 65%, respectively, but in FY09 medium farms had a 75% compliance rate, while large farms had just 21%.

Shade management plans: Over half of the large farms verified for FY08 had shade management plans in place, but this fell to 8% in FY09 and rose back up to 32% in FY10. Medium farms saw their highest compliance rate in FY10 at 54%, compared to the lowest in FY09 at just 16%. The percentage implementing these plans in the three years mirrored the rates of those having the plans. For instance, 73% of medium farms were implementing their shade management plans in FY10, up from 51% in FY08 and 18% in FY09. Large farms saw their highest rate of compliance in FY08 (69%) followed by just 8% in FY09 and 37% in FY10.

Wildlife management plans: Compliance rates for wildlife management plans were relatively low when compared to those for the other types of plans included in this section of the report. In no year did even a third of farms have plans developed on the basis of consultations with relevant government agencies or universities. Large farms had 31% compliance in FY08, but only 9% in FY09 and 20% in FY10. Medium farms had 21% compliance in both FY08 and FY10, but just 9% in FY09. The percentage of farms properly implementing these plans was also relatively low, although 46% of large farms complied in FY08. In subsequent years, however, the rates were much lower at 8% in FY09 and 24% in FY10. Medium farms had the highest compliance rate in FY10 at 31%, up from 24% in FY08 and 6% in FY09. Given the relatively low levels of compliance with these two indicators, there may be an opportunity to further engage these producers in providing technical assistance and advice in developing wildlife management plans.
Monitoring systems: More medium and large farms verified for FY08 had monitoring programs in place on the farm to track activities and improvements in C. A. F. E. Practices than in any of the other two years. Across the entire population, 59% had these programs in FY08 versus just 18% in FY09 and 44% in FY10. Large farms had higher rates of compliance for this indicator than medium farms in FY08 and FY09, but medium farms performed higher in FY10. Among medium farms in FY10, 23% did not report against this indicator, and it is unclear why a verifier would mark this practice not applicable to a farm.

4.3.5. Coffee Growing – Environmental Responsibility Conclusions and Recommendations

Between FY07 and FY10, average scores for the coffee growing section of the scorecard increased from 62% to 73%. This shows a general increase in the adoption of better practices over time, although some room for improvement remains. As part of this analysis, we analyzed seven of the nine criteria requirement indicators in the program. Among these criteria, performance was relatively high and of particular note are the following:

- 99-100% of farms have not converted any natural forest area to agricultural production since March 2004.
- 98-99% of farms did not apply chemicals listed by the World Health Organization as Type 1A or Type 1B.
- 97-98% of farms refrained from removing trees on the farm unless they presented a human hazard or competed significantly with coffee production.
- 94-97% of farms maintained 2m buffer zones along at least 25% of water bodies on the farm.

Other criteria requirement indicators showed significant room for supplier development and improvement. For instance, only 77-81% of farms were refraining from chemical application within 10m of water bodies. Another indicator of relatively low performance was the one evaluating whether farms had taken steps to restrict unauthorized hunting and commercial collection of flora and fauna, where only 52-73% of farms complied with this practice across the three years. Finally, the criteria requirement with the lowest compliance rate was the one evaluating whether farms had implemented a monitoring program related to C. A. F. E. Practices. In this case only 18-44% of farms were doing so.

Additional areas of high performance include the following:

- Over half of the farms (59-66%) were protecting all water bodies on the farm with riparian buffers, and compliance rates for small farms protecting at least 50% of water bodies with riparian zones steadily rose over the three years of verifications. In addition, over half of the buffer zones on farms consisted of native woody vegetation.
- Most farms were taking measures to protect at least half of their steep slopes against erosion, especially slopes of between 10 and 20% and those over 30%.
- The percentage of farms using pesticides only as a last resort increased over time from 57% in FY08 to 83% in FY10.
- A significant portion of the farms participating in C. A. F. E. Practices did not use herbicides to control ground vegetation/cover crops and only used them in spot applications to control aggressive weeds.
- Over the three years of verifications the number of hectares managed for conservation purposes that joined the program or continued to participate each year stayed relatively stable at between 102,281 ha in FY08 and 108,632 ha in FY10, although there was a small, steady increase in this number over the three years. As each year represents different supply chains, the total conservation hectares on farms active in the program is much greater than any one particular year.
• Most farms had 10% shade canopy cover across the farm, with compliance rates of over 80% across all years and farm sizes. The only exception occurred among small farms verified for FY09 when only 62% maintained this level of shade.

• The vast majority of the medium and large farms verified have set aside 5% of their land for conservation.

• Most medium and large farms (66%-96%) were protecting areas of high ecological value on their farms. There was also a positive trend towards more of these farms ensuring these areas remain protected from future development through the declaration of private reserves, conservation emphasis areas, or legal conservation easements, with 22% complying in FY08, 53% in FY09 and 56% in FY10.

Although performance was high in these areas, this analysis has also identified some areas for supplier development and improvement at the farm level. As several of these concern compliance rates of medium-sized farms for key indicators, there may be a significant opportunity to enhance the performance of these farms by targeting technical assistance and other programs. Such interventions might focus on protecting waterways from agrochemical runoff and finding and promoting alternatives to WHO Type 1A and 1B chemicals, as 16-21% of these farms continued using these products in FY09 and FY10. This outreach should also include the promotion of habitat conservation on these farms as 1-4% had converted natural forest to agricultural use in FY08 and FY09.

Both medium and large farms had low compliance rates for reducing the toxic load of chemical application over time, refraining from the use of synthetic fertilizers (an indicator where compliance rates were actually decreasing over time), and the development of environmental- and wildlife-management plans.

The one area where small farms may require additional assistance is in the adoption of cover crops and leguminous trees to maintain soil fertility over time. The adoption of these practices by small farmers lagged behind those of larger farms and this may present an opportunity for PSOs to increase services related to facilitating access to seeds and seedlings and providing training on these practices.
5. Producer Support Organizations

Producer support organizations (PSOs) support smallholder coffee growers participating in C. A. F. E. Practices by aiding in farm-management processes, providing various forms of technical assistance and working together with growers to advance best practices. These entities may take the form of a cooperative, an export company, a mill, an NGO or other group invested in helping C. A. F. E. Practices, and small-scale farmers in particular, succeed. PSO verification takes place in conjunction with applications consisting of small farms to assess service provision to these farms. Starbucks launched the PSO section of the smallholder scorecard in FY08 and continued to collect data in FY09 and FY10. The following section examines trends exhibited over the period from FY08 through FY10.

The C. A. F. E. Practices program uses 38 indicators to assess PSO performance. These indicators look at issues ranging from soil management plans and use of chemicals to record-keeping associated with the purchase of coffee. For each application with smallholders there is also a verification report for the PSO, which enables analysis of all participating PSOs without requiring data extrapolation. We analyzed the PSO data to determine overall performance across all applications including small farms (less than 12 hectares) and performance at the individual country level. Since some PSOs can serve this role in multiple applications, we treated each verification report as a separate PSO and did not eliminate duplicate PSO identification numbers, given that Starbucks treats them as separate records within the program (and they occur within separate applications) and the evaluations are specific to the farms included in the particular application. The results of this analysis are presented below.

5.1 PSO Participation Rate

In FY10, 340 applications that included 196 PSOs across 12 countries underwent verification, which is slightly fewer than the 354 verified for FY08. In FY09, only 124 PSOs underwent the verification process, but these spanned 15 countries. (See Figure 21.) The number of farms receiving services from PSOs peaked in FY09 at 146,866 from 139,517 in FY08, even though the actual number of PSOs participating in the program declined between those two years. The number of PSOs increased again in FY10, but the number of farms receiving services from them was lower than in both FY08 and FY10 (n=101,789).

Figure 21: PSO Verifications, FY08-FY10

The vast majority of the PSOs verified for FY10 were in North and Central America in FY08 and FY10, but in FY09 the majority was from South America. (See Table 20.)
Table 20: Number of PSO Verifications per Region, FY08-FY10

PSOs can take many forms, ranging from cooperatives and mills to coffee associations, exporters, societies and collectors, and in some cases they may also be foundations and non-governmental organizations. Within applications, verifiers must note the type of business the PSO represents, but in FY08 this information was too varied to enable analysis. For FY09 and FY10, there was greater consistency in the dataset, although it still included 26 different categories and over a quarter of the applications (27%) marked this unknown or left it blank. The data does show that the cooperatives, mills and export companies form the majority of PSOs within the program. Based on feedback in the FY08 report to standardize the PSO type options rather than leave them open ended, the PSO type options have been standardized starting with FY12 applications. (See Figure 22.)

In looking at compliance rates for PSO indicators achieved by the various types of PSO entities, we find that the highest rates were achieved by mills (68-70% compliance across the indicators). There was a case of a foundation playing this role for one application that had a higher rate of 89% but this was the only foundation reported in the dataset. Of those entities representing the greatest proportion of PSOs, societies, associations, exporters and cooperatives all had average compliance rates of 50-60% across the PSO indicators. Those identified as collectors had the lowest rates of 22%.
5.2. Management and Tracking Systems

- Percentage of PSOs with tracking systems from purchase to point of export
- Number of PSOs with an annually updated list of producers participating in the C. A. F. E. Practices program
- Number of small farms that receive a receipt for their coffee
- Number of small farms that received a written agreement or identification card upon their commitment to comply with C. A. F. E. Practices
- Percentage of PSOs maintaining farm inspection reports, maps and description

Three of the management and tracking-systems indicators within C. A. F. E. Practices are zero-tolerance indicators that, if not met, require a PSO action plan to remediate and regardless of score performance these applications are granted verified status to ensure re-verification in one year. These indicators require PSOs to have a coffee-tracking system in place, have an annually updated list of producers participating in the program and to ensure farmers receive a receipt for their coffee. Analysis of the FY08-FY10 data show a general trend towards increased uptake of management and tracking systems by PSOs for all but a few indicators. Nearly all PSOs (99%) had tracking systems from point of purchase to point of export in place in FY10 and this was up from 97% and 94% in FY08 and FY09, respectively. Only Nicaragua and Guatemala had compliance rates of less than 100%, although Guatemala saw an increase in FY10 to 98% from 75% in FY09. Guatemala’s compliance rate in FY08 was more consistent with FY10 at 93%. Guatemala was also the only country in which PSOs verified failed to achieve 100% compliance in at least one of the three years analyzed.

The number of PSOs with an annually updated list of producers participating in the C. A. F. E. Practices program has been consistently high from FY08 through FY10 with compliance rates of 98%, 99% and 99%, respectively. Colombia is the one country in which PSOs have not achieved 100% compliance during at least one of the three years, with rates of ranging from 94% to 97%.

The third zero-tolerance indicator for PSOs is for the provision of receipts to farmers for their coffee. The rate of compliance was highest in FY10 at 95% compared to 87% in FY09 and 91% in FY08, but there is significant variation in compliance rates across countries and across fiscal years. (See Figure 23.) For instance, Papua New Guinea had a compliance rate of 67% for verifications taking place in FY10, but 100% in both FY08 and FY09. Tanzania had the lowest rates of compliance, at 25% in FY08 and just 7% in FY09, which warrants a closer look into the PSOs in that country.

![Figure 23: Percentage of PSOs Ensuring Each Farm in the Supply Chain Receives a Receipt for Coffee](image)

PSOs were less likely to have a process in place for providing a written agreement or identification card upon commitment by the farm to comply with C. A. F. E. Practices. Generally, around half of the PSOs complied with this practice in any of the three given years, with global compliance rates ranging from 50% in FY10 to 58% in FY08. (See Figure 24.) Rwanda and Kenya did have 100% compliance in FY10 for this indicator, but Kenya was the only
country to have 100% compliance across two years of verifications. Similarly, relatively low levels of PSOs maintained inspection reports, maps and descriptions of the farms within their system, with only 53% of PSOs complying with this indicator in FY10. This was only a slight increase from the 52% compliance rate in FY08. Kenya was the only country exhibiting 100% compliance in FY10, and at the other end of the spectrum, El Salvador and Costa Rica had 17% and 18% compliance, respectively in FY10, down from 100% each in FY09.

![Figure 24: Percentage of PSOs Providing Farmers with a Written Agreement or Identification Card upon Their Commitment to Comply with C. A. F. E. Practices](image)

**5.3. Soil Erosion and Productivity**

- Percentage of PSOs with soil management plans that include erosion-reduction strategies
- Percentage of PSOs that facilitate distribution of erosion controls to 5, 15 and 25% of producers in network
- Percentage of PSOs distributing or applying synthetic fertilizers on small farms
- Percentage of PSOs implementing soil- and foliar-testing strategy

Within C. A. F. E. Practices, PSOs are tasked with assisting small farmers in controlling against soil erosion. During the FY08 to FY10 period, the compliance rates for soil-management indicators fell within the 50-75% range for FY08 and FY10, but dipped to 30-50% in FY09. Although the population of PSOs varied from year to year, at least 60% had soil management plans for their network of farms. The group of PSOs verified for FY08 had the highest level of compliance over the three years with 75% of them having these plans in place.

In FY10, 78% of the PSOs verified identified erosion-control resources for farmers in their network, which exceeded the rate for those verified for FY09 (66%), but was relatively on par with FY08 (79%). The C. A. F. E. Practices program also assesses whether the PSOs are distributing these resources to more than 5%, 15% and 25% of their respective small-farm networks. In any of the three given years, only 38-52% of the PSOs distributed these resources to more than 25% of their small-farm network, with the highest performance occurring in FY10. (See Figure 25.) As might be expected, the compliance rates tend to decline as the threshold for the percentage of farms receiving these services increases. Rwanda had the highest rate of compliance in FY10 at 100%, increasing its rate from 50% in FY08. Costa Rica (83% in FY10), Nicaragua (75% in FY10) and Peru (82% in FY10) were the only other countries with rates at or above 75% for more than 25% distribution.

According to the C. A. F. E. Practices guidelines, PSOs should also assist small farms in managing the use of synthetic fertilizers when these are used. Although the number of applications reporting these indicators as not applicable varies across the indicators, it can be estimated that at least 20% of the small-farm networks in any given
year do not use synthetic fertilizers. For those that do, PSOs should work with the network to conduct soil analyses and foliar testing to determine appropriate application levels. Across the three years, PSOs tended to perform higher in FY08 and FY10 than in FY09 for each of the indicators related to the management of synthetic fertilizers. For instance, 78% of PSOs in FY10 had soil management plans that included strategies for soil analysis from representative plots within the network, which was slightly higher than the 74% in FY08 and significantly higher than the 55% in FY09.

The likelihood of PSOs having a timeline for conducting foliar analyses to determine appropriate fertilizer application rates and carrying out the plan according to the timeline varied greatly across the three years of verifications. For instance, in FY08 50% of PSOs had developed a timeline for implementing a soil- and foliar-testing strategy, but in FY09 and FY10, only 28% and 63% had timelines in place, respectively. (See Figure 26.) The rate at which countries had strategies in place for testing and analysis of soil varied in FY10 from 11% (Indonesia) to 100%. For the most part, however, rates of compliance increased over the last three years, with Nicaragua having the highest jump (23% to 69%). El Salvador did see a decrease from 67% in FY08 to 17% in FY10.

The indicators also look at whether those PSOs having the timeline in place are implementing the strategy according to the timeline. The FY08 report noted that reporting across these two indicators was inconsistent, as there were a number of cases where a PSO had a strategy that included a timeline, but then was not assessed against the indicator that tracks whether the strategy was being implemented according to that timeline. When looking at the global data for the three years, it appears there continues to be some inconsistencies in how verifiers are marking this set of indicators and further training on this may be required.
5.4. **Shade Canopy and Wildlife Protection**

- Percentage of PSOs with shade management plans
- Percentage of PSOs that have identified resources for distribution of shade trees or seedlings
- Percentage of PSOs with lists of wildlife species native to the region

Verification of PSOs includes an assessment of the support provided to the small-farm network on shade management and the general understanding by the PSO of the importance of the coffee-production landscape in conjunction with wildlife conservation. PSOs verified for FY09 and FY10 were slightly less likely to have shade management plans in place for the network of farms than those verified for FY08, but for all years, over half of the PSOs verified had plans in place. (See Figure 27.) In FY08, 71% of PSOs had these plans in place, whereas of those verified for FY09 and FY10 only 55% and 64%, respectively, had them. There were some PSOs complying with this indicator in all countries, aside from Brazil, where there is not a history of shade-coffee production. Rwanda was the only country where this indicator was marked not applicable by the verifier for several PSOs. Six of the 12 countries with PSOs did not have verifications taking place in FY10, but of the six that did, four had rates above 90% in FY10 and experienced higher levels of compliance when compared to FY08 verifications (Costa Rica, Kenya, Peru and Rwanda).
Across most countries, PSOs are managing to identify more resources for the distribution of shade trees or seedlings. Compliance rates have been 62% or more in each of the years analyzed and reached 68% in FY08 and 69% in FY10. Costa Rica and Peru have consistently seen PSOs perform the best across all three years, with compliance rates exceeding 98% and 85%, respectively. Rwanda and Kenya had big increases from around 70% to 100%, although El Salvador had the greatest variation in performance with 100% compliance in FY09, but only 17% compliance in FY10. Indonesia and Nicaragua also showed a high degree of variability across the three years of verifications, in which no PSOs complied with the indicator during the period.

C. A. F. E. Practices also encourages PSOs to understand the importance of wildlife in the areas under coffee production by compiling a list of wildlife species native to the region and classified as vulnerable, endangered or critically endangered according to the IUCN Red List of Threatened Species. Compliance with this indicator has varied over the three years of applications, but peaked in FY08 at 52%. In FY09, only 25% of the applications verified had lists, but in FY10 the compliance rate of 51% was more on par with that of FY08. (See Figure 28.) Kenya was the only country to exhibit full compliance with this indicator in any of the given years. Bolivia, Burundi, Brazil, Rwanda and Tanzania had no PSOs complying with this indicator in any of the years in which verifications occurred.

![Figure 28: Percentage of PSOs Creating a List of Wildlife Species Native to the Region and Identified According to the IUCN Red List](image)

**5. 5. Ecological Pest and Disease Control**

- Percentage of PSOs not using Type 1A or 1B chemicals as listed by the World Health Organization
- Number of small farms applying agrochemicals only as a last resort
- Number of small farms where coffee berry borer infestation is an issue
- Percentage of PSOs facilitating distribution of biological control agents or traps for 5, 15 or 25% of the producer network

PSOs also assist small farms in their network in controlling against pest and disease outbreaks. There has been a slight decrease in the percentage of PSOs refraining from using chemicals classified as Type 1A and 1B by the World Health Organization over the three years of verifications. The 93% compliance rate in FY08 remained steady in FY09, but fell slightly to 88% in FY10. (See Figure 29.) Most PSO countries have complied very well with this indicator on the use of harmful chemicals over the reporting time frame. Rates have been at or above 90% for each of the years in which verifications took place in each country. These countries include: Colombia, Costa Rica, Ethiopia, Kenya, Mexico, Papua New Guinea, Rwanda and Tanzania. Guatemala and Nicaragua had more variability in their compliance rates across the three years with ranges from 59-98% and 50-80%, respectively.

The majority of small farms working with PSOs only applied chemicals as a last resort (PS-EM1. 5). The percentage remained above 72% for all three years and climbed to 87% in FY10. Brazil, El Salvador and Nicaragua all had...
zero PSOs complying with this indicator in FY09, although in El Salvador and Nicaragua this was not the case for other years in which verifications took place. In Brazil, FY09 was the only year in which PSO verifications occurred. Colombia, Costa Rica, Guatemala, Honduras, Kenya and Tanzania had every PSO complying with this indicator across two years of verifications. No country that had verifications taking place in all three years had 100% compliance across all years.

Infestation of coffee berry borers can be devastating, particularly to small farms. Ensuring distribution of control agents to treat this infestation is critical to successful coffee growing. The C. A. F. E. Practices indicators verify whether PSOs facilitate the distribution of biological control agents or methanol/ethanol traps for more than 5, 15 or 25% of farms in their producer networks. As might be expected, the compliance rates tended to decline as the threshold for the percentage of the network receiving this support increased. (See Figure 30.) Compliance rates were the lowest in FY09 and highest in FY10 for the set of indicators. Nine of the 12 countries reported on this indicator, which signifies the extent of coffee berry borer across small farms participating in the program. However, no PSOs in Brazil, Ethiopia, Tanzania and Papua New Guinea provided any support to small farmers in controlling infestations among small farms or didn’t report, depending on the year.
5. 6. **Environmental Management and Monitoring**

- Percentage of PSOs with monitoring programs to track farm activities and improvements across 5, 10 and 15% of their network
- Percentage of PSOs that hold annual planning meeting(s) to develop a written annual work plan
- Percentage of PSOs that develop a written management plan
- Percentage of PSOs implementing management plan with more than 5, 15 and 25% of their network
- Percentage of PSOs with documented materials for training members on shade management, integrated pest control and disease management, pruning, weeding and cultural management and processing and drying coffee
- Percentage of PSOs training more than 5, 15 and 25% of their network

The C. A. F. E. Practices guidelines consist of 13 indicators used to verify PSOs on environmental management and monitoring. These range from having a management plan and annual work plan to providing training to farmers in their networks. The first set of indicators looks at the percentage of PSOs with monitoring programs in place for 5, 10 or 15% of their network. PSOs verified for FY08 achieved the highest compliance rates (between 75 and 80%) compared to those in other years, with the greatest decline occurring between FY08 and FY09. ([See Figure 31.](#)) Brazil and East Timor were the only countries where no PSOs had management plans in place for small-farm networks. Kenya and Rwanda were the only to have all PSOs monitoring 15% of their networks.

![Figure 31: Percentage of PSOs Monitoring Farm Performance across 5, 10 and 15% of their Networks, FY08-FY10](#)

At least 57% of PSOs held annual planning meetings to develop written annual work plans detailing C. A. F. E. Practices activities to be undertaken in FY08, FY09 and FY10. PSOs verified for FY08 and FY10 were more likely to hold these meetings, with compliance rates of 76% and 69%, respectively. Burundi and East Timor had no PSOs complying with this indicator, but as a whole, countries’ trends show an increase in compliance rates over the course of the three years.

The percentage of PSOs preparing a written management plan (PS-EM2. 5) has stayed relatively constant over time, ranging from 56% in FY09 to 60% in FY10. The percentage implementing these plans with more than 5, 15 or 25% of the farms in their networks has varied across the three years, with FY09 representing the lowest levels of implementation. ([See Figure 32.](#)) Variation across the thresholds was rather consistent in FY08 and FY09, but in FY10 the difference between the percentage of PSOs implementing with 5% of their networks versus 25% of their networks was only 3%. Papua New Guinea, Rwanda, Kenya and Guatemala have been consistently in compliance with these indicators. Ethiopia, however, has had lower compliance rates.
The development of training materials and organization of training sessions for small farms is another key role that PSOs play in the program. At least 66% of PSOs verified for any given year had developed documented training materials for small farms in their networks on shade management, integrated pest control and disease management, pruning, weeding and cultural management, as well as wet and dry processing. This was the percentage complying in FY09, but represents the lowest rate across the three years. In FY08, the level was 77% and in FY10 even higher at 87%. Half of the countries reported 100% compliance in FY10, and another two were at 94% and 97% respectively. No country had a compliance rate for any year below 67%. Compliance rates have either held steady since FY08 or increased, except in the case of El Salvador, where FY10 rates were at 67% and FY08 and FY09 rates were at 92% and 100%, respectively.

The percentage of PSOs training more than 5, 15 or 25% of the small farms in their networks has varied across the three years. In FY08, 97% of PSOs provided training to at least 5% of the farms in their networks, which was significantly higher than compliance rates in subsequent years. The variability among the threshold levels has decreased from FY08 to FY09 and FY10. In particular, 68% of PSOs trained more than 25% of their networks on key topics in FY10. This was up from 56% in FY09 and 63% in FY08. PSOs in Papua New Guinea, Peru and Rwanda were 100% compliant in meeting the >25% threshold in FY10, and each saw improvements over the last three years. East Timor was the only country in which PSOs did not comply with the 5% threshold, although only one PSO was verified from that country and only in FY09. In both FY09 and FY10, there were four countries in which all of the PSOs complied with the >25% threshold, but in no case did a country achieve 100% across two years. The countries achieving 100% compliance in at least one year were: Bolivia, Colombia, Costa Rica, El Salvador, Papua New Guinea, Kenya, Rwanda and Peru. Colombia’s rates grew from 63% in FY08 to 100% in FY09 but fell back in
FY10. The same trajectory was seen in Costa Rica (59% and 100% for FY08 and FY09, respectively). El Salvador saw a drop, with rates beginning at 92% in FY08, rising to 100% in FY09, and falling to just 50% in FY10.

5.7. PSO Conclusions and Recommendations

The number of PSOs verified for any given year ranged from 124 in FY09 to 354 in FY08 and most took the form of cooperatives, mills or coffee associations. In FY09 and FY10, those PSOs that were mills had the highest compliance rates across the set of indicators verified when compared to the other types of entities filling this role for networks of small farms. In FY08, PSO compliance rates in general were average and only a few were in the high range. The highest compliance rate was 98% during that year (maintaining an annually updated list of participating producers). By FY10, every indicator had at least one country (and in most cases, several countries) in full compliance.

PSOs performed particularly well for a couple of the criteria requirement indicators for this section of the scorecard. For instance, nearly all PSOs (99%) had tracking systems from point of purchase to point of export in place in FY10 and this was up from 97% in FY08 and 94% in FY09. In addition, between 98% and 99% of PSOs maintained an annually updated list of producers participating in the C. A. F. E. Practices program. Finally, PSOs also performed well in guiding their farm networks in refraining from the use of the most harmful chemicals, with compliance rates at or above 90% for each year in which verifications took place in each country with smallholder networks participating in C. A. F. E. Practices. Given the important role of the PSO in assisting small farms, aiding and supporting farmers and the surrounding communities and assuring productivity stays at its highest possible level, seeing the positive trend and the work put in by these entities to assist small farms in meeting C. A. F. E. Practices requirements is encouraging.

There is still work to be done, however, and areas of potential improvement for PSO performance include:

- Ensuring that all small farms receive a receipt for the coffee they deliver/sell, as this was the zero-tolerance indicator with the lowest compliance rate (87-95%).
- Encouraging more PSOs to provide a written agreement or identification card upon commitment by the farm to comply with C. A. F. E. Practices, as only just over half are currently doing so.
- Increasing the percentage of PSOs distributing soil-erosion control resources to at least 25% of their small-farm networks to over 38-52%.

Finally, as noted in the coffee growing section of this report, PSOs should also be encouraged to assist small farms in adopting cover crops and leguminous trees by supporting efforts to locate and distribute seeds and seedlings and providing training on these practices.
6. Mills

In addition to verifying social and environmental conditions of farms, the C. A. F. E. Practices program contains guidelines, criteria and indicators for verifying these conditions at mills and farms that process coffee. Suppliers use a range of different technologies and processes for converting coffee cherries into green coffee for export to Starbucks, and this processing may occur on farms or at mills managed independently from the farms. Within the program all of the social responsibility indicators used to verify performance for medium and large farms also apply to mills. A unique set of criteria and indicators are used to verify environmental performance related to water use and discharge, waste management and energy conservation during coffee processing. As with the coffee growing section of the C. A. F. E. Practices guidelines, verifiers apply only a subset of the environmental indicators when assessing small farms that carry out some wet processing on the farm.

6.1. Methodology

Analysis of the coffee processing data followed a somewhat different methodology from that used for the coffee growing section, due in part to the number of mill types included in the verifications and the fact that some mills do both wet and dry processing. In addition, there are significant numbers of small farms in some countries that do some wet processing on site, but for which only a sample undergo the verification process. For these small farms the social responsibility analysis is reflected in the social responsibility section above and not repeated here, as often the workers perform both farm and milling job responsibilities. To analyze the coffee processing on small farms we extrapolated the sample size to the population of farms reporting on-farm wet processing as reported within the respective application. Starbucks manages this data within a separate database that we linked to the VRS export files for mills to identify the appropriate multiplier to use for the extrapolation.

All milling associated with large- or medium-sized farms must undergo a mill evaluation in which a separate mill identification number is assigned to the entity within the given application. For these mills no extrapolation is necessary. In some cases, however, a single mill may process coffee for several applications and when this occurs, the mill only undergoes the verification process a single time and the results can be included in the various applications where the mill is active. Where duplicate mill records occurred within a fiscal year, we deleted these duplicates. Also, over the three-year time period included in the analysis some records were copied from year to year in cases where the mill received a multi-year validity, thus not requiring re-verification until a later year. In these cases we retained the records in the multiple years.

The C. A. F. E. Practices guidelines contain specific environmental indicators for wet processing versus dry processing. For those mills that had the capacity to do both wet and dry processing, we counted the mill as both a wet and dry mill for the purposes of the environmental reporting. For the social responsibility section, however, we kept these mills as a separate category to see if their performance differed significantly from that of mills that did only wet or dry processing.

Review of the mill data files for FY10 showed nine wet mills in Guatemala that underwent re-verifications during that period. For this reason we used only the most current verification in this analysis. There was also one case where a wet mill (M12580) was listed in the VRS report but had no compliance data for the environmental indicators in the report. In this case we excluded the mill from the analysis. Finally, there were three cases in which applications reported having small farms that conducted some wet milling but were not included in the analysis due to either a lack of alignment within the VRS and the agronomy database on whether wet milling took place at the farm level within the application (two cases) or the lack of verification data for an application where on-farm processing was reported (one case).

When reviewing the FY08 results, we noted an error in calculating this multiplier for small farm on-premises milling and have corrected this for the current report. As a result, the FY08 results will show some changes for the six countries that had small farms conducting some wet milling. This change, coupled with a review of the applications with small-farm wet milling for which there were no verification records for wet processing on farms in these applications (n=30) resulted in a slight decline in the number of farms that could be included in the FY08 analysis. The difference between the number of small farms processing coffee according to application information and the number sampled within the verifications was noted in the FY08 report and this change in extrapolated results did not affect the total number of farms doing wet milling, only the proportion that could be included in the analysis of verification results for these farms. For the updated extrapolation, however, we were able to only include 34,740 small farms. Moving forward we will use these revised figures for FY08 in future reports.
6. 2. General Participation Data

- Number of mills by type
- Number of workers employed by stand-alone mills

The number of mills verified for each of the three years analyzed varied significantly across all four types of mills included in the program. The number of entities processing coffee within the program in each year varied significantly, with only 18,665 mills verified for FY09 compared to 35,713 in FY08 and 82,477 in FY10. (See Table 21.) One reason for this variation is the change made to the C. A. F. E. Practices program in FY09 to grant validity for the year in which the application is verified, which may have resulted in what previously might have been considered an FY09 mill becoming a FY10 mill. In addition, there were a couple of large applications verified for FY10 that had tens of thousands of small farms that did wet processing.

<table>
<thead>
<tr>
<th>Mill Type</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet - on farm</td>
<td>34,760</td>
<td>18,221</td>
<td>81,777</td>
</tr>
<tr>
<td>Wet - stand alone</td>
<td>715</td>
<td>231</td>
<td>486</td>
</tr>
<tr>
<td>Wet and Dry</td>
<td>67</td>
<td>121</td>
<td>62</td>
</tr>
<tr>
<td>Dry</td>
<td>191</td>
<td>92</td>
<td>152</td>
</tr>
</tbody>
</table>

Table 21: Number of Participating Mills, FY08-FY10

The vast majority of entities processing coffee were small farms doing some wet processing before transporting the coffee to a cooperative mill, export company or other type of intermediary. Small-farm wet milling accounted for between 97 and 99% of all participants conducting some coffee processing in the program. Only a subset of the countries represented in the program had small farms doing some wet milling in any given year. Brazil, Colombia, Costa Rica, Guatemala, Indonesia, Mexico, Nicaragua and Peru all had some small farms doing some wet milling. Thus, the majority of countries where coffee was wet milled on small farms were in the North and Central America region, although Indonesia and Colombia also had a high number of small farms doing some processing in FY10.

The percentage of small farms that did wet milling varied significantly across the three years of verifications. In FY10, 80% of the small farms verified did some wet milling and this figure was significantly greater than the proportion that did wet processing in FY08 (25%) or FY09 (11%). Colombia and Indonesia accounted for significant proportions of small-farm wet milling in FY10 with over 40,000 and 29,000 farms processing coffee in this way, respectively.

Of the stand-alone mills processing coffee, the majority were wet mills, followed by dry mills. Mills doing both wet and dry processing represented the smallest population across the three years. The percentage of dry mills relative to all stand-alone mills remained relatively stable at around 20% over the three years.

6. 3. Coffee Processing – Social Responsibility

Stand-alone mills participating in C. A. F. E. Practices employ a large number of workers in any particular year. The total number of workers across the three years ranged from 20,139 in FY09 to 44,445 in FY08. (See Table 22.) The vast majority of the workers were temporary or seasonal labor employed by dry mills, although these mills represented only 20% of the total mills verified over the three years. Dry mills accounted for more full-time employment than the other two categories. In all cases the number of workers employed by mills was higher in FY08 than in any of the subsequent years. This may be due in part to the higher number of stand-alone mills verified for that year when compared to the other years.

Verifiers assess stand-alone mills according to the same social responsibility indicators applied to medium and large farms to determine whether hiring practices for workers comply with or exceed minimum labor standards and if working conditions provide a safe, healthy environment for workers. This section presents the global social responsibility results for stand-alone mills verified during the FY08 to FY10 period. It does not include analysis of social practices on the small farms that conduct wet milling, as these were already included in the farm section of this report.
Table 22: Number of Workers Employed by Mills Participating in C. A. F. E. Practices, FY08-FY10

6.3.1 Minimum Labor Standards

- Number of mills where child labor occurred
- Number of mills where forced or bonded labor occurred
- Number of mills where minimum wage was not paid to workers
- Number of mills non-compliant with more than one of the minimum labor standards

Mills must comply with each of the minimum labor standards indicators to achieve an approved status within the C. A. F. E. Practices program. Over the three-year time frame, 67 mills failed to comply with at least one of the minimum labor standards, resulting in 72 incidents of non-compliance across the seven indicators. (See Table 23.) In some cases a single mill failed to comply with multiple zero-tolerance indicators related to the labor standards. The majority of non-compliance incidents occurred at wet mills. Dry mills had the second-highest number of incidents and mills that did both wet and dry milling had the fewest incidents of non-compliance. The data shows an overall trend towards fewer wet mills failing to comply with these indicators between FY08 and FY10, although in most cases FY09 had the fewest incidents of non-compliance (and also smallest count of mills). This trend held true for dry mills as well.

Table 23: Incidents of Non-Compliance with Zero-tolerance Indicators
Most of the non-compliance incidents were for failure to pay workers the nationally or regionally established minimum wage and this was most notable for temporary/seasonal workers. Verifications in both FY08 and FY10 found two wet mills employing minors under the age of 14. In FY08, these occurred at mills in Peru and Nicaragua. The two mills failing to comply with this indicator in FY10 were from Colombia. Colombia also failed to comply with the indicator requiring that employment of minors older than 14 does not conflict with their access to education. Another wet mill in Nicaragua failed to comply with the latter indicator in FY09.

In FY08 there were five incidents of wet mills failing to have an enforced policy on non-discrimination, but subsequent years show no mills failing to comply with this indicator. Finally, across all three years there were no incidents of forced, bonded, indentured or involuntary convict labor at coffee mills.

A small number of mills failed to comply with more than one zero-tolerance indicator in a given year. A single wet mill in Nicaragua failed to comply with three indicators in FY08, but this was the only case where a mill failed more than two of the zero-tolerance indicators. There were 16 mills that failed to comply with two of the zero-tolerance indicators over the course of the three years and ten of these (63%) occurred during the FY10 verification period. (See Table 24.)

Of those mills failing to comply with two indicators, most failed to pay both full-time and temporary/seasonal workers the established minimum wage. These mills were located in Guatemala (n=2) and Papua New Guinea (n=1) in FY10 and Rwanda (n=1) and Tanzania (n=1) in FY09.

<table>
<thead>
<tr>
<th>No of Mills NC with</th>
<th>Wet</th>
<th>Dry</th>
<th>Both</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
<td>FY09</td>
<td>FY10</td>
<td>FY08</td>
</tr>
<tr>
<td>3 ZT Indicators</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2 ZT Indicators</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1 ZT Indicators</td>
<td>16</td>
<td>10</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>10</td>
<td>20</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 24: Number of Mills with Non-Compliance with Zero-tolerance Indicators

Although there were incidents of non-compliance with these minimum labor standards, the ability of verifiers to uncover these violations lends credibility to the C. A. F. E. Practices verification process. It is also notable that the relative percentage of non-compliance with this set of indicators is very low across all three years of verifications. (See Table 25.) In addition, there is a positive movement towards more of these indicators having 100% compliance in FY10 (four indicators) than in either FY08 or FY09 (three indicators). Mills that did both wet and dry processing had the highest compliance rates, and in FY09 and FY10 had 100% compliance across all participating mills in those years. Dry mills also performed relatively well, especially in FY10 when the only zero-tolerance indicator at less than 100% compliance was the payment of minimum wage to full-time employees, which was at 99.3%.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP1.1 All full-time workers are paid the nationally or regionally established minimum wage</td>
<td>99%</td>
<td>98%</td>
<td>98%</td>
</tr>
<tr>
<td>SR-HP1.2 All part-time workers are paid the nationally or regionally established minimum wage</td>
<td>99%</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>SR-HP1.3 All temporary/seasonal workers are paid the nationally or regionally established minimum wage</td>
<td>98%</td>
<td>96%</td>
<td>98%</td>
</tr>
<tr>
<td>SR-HP4.1 Employer does not directly contract any persons under the age of 14</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>SR-HP4.2 Employment of authorized minors older than 14 does not conflict with their access to education</td>
<td>100%</td>
<td>99%</td>
<td>96%</td>
</tr>
<tr>
<td>SR-HP4.3 Management has an enforced policy prohibiting discrimination on the basis of gender, race, ethnicity, age or religion as per ILO Convention 111</td>
<td>99%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>SR-HP4.4 Employer prohibits the use of forced, bonded, indentured or involuntary convict labor</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 25: Mill Compliance Rates for Zero-tolerance Indicators, FY08-FY10
6.3.2. Improved Compensation

- Number of mill workers paid at or above minimum wage
- Percentage of mills paying overtime at or above the legal minimum requirement

According to the compliance rates noted in the previous section, 39,815 workers received the legally mandated minimum wage in FY08, 19,141 in FY09 and 27,181 in FY10. (See Table 26.) The majority of these workers were temporary/seasonal employees at dry mills.

<table>
<thead>
<tr>
<th>Worker Type</th>
<th>Dry</th>
<th>Wet</th>
<th>Wet and Dry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
<td>FY09</td>
<td>FY10</td>
<td>FY08</td>
</tr>
<tr>
<td>Full-Time</td>
<td>3,277</td>
<td>3,456</td>
<td>3,538</td>
<td>1,120</td>
</tr>
<tr>
<td>Part-Time</td>
<td>729</td>
<td>202</td>
<td>398</td>
<td>357</td>
</tr>
<tr>
<td>Temporary/Seasonal</td>
<td>17,794</td>
<td>8,898</td>
<td>10,186</td>
<td>11,707</td>
</tr>
<tr>
<td>Total</td>
<td>21,800</td>
<td>12,556</td>
<td>14,122</td>
<td>13,184</td>
</tr>
</tbody>
</table>

Table 26: Number of Workers Receiving Legally Mandated Minimum Wage, FY08-FY10

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Wet</th>
<th>Dry</th>
<th>Wet &amp; Dry</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP1.11 All full-time workers are paid more than the nationally or regionally established minimum wage</td>
<td>80%</td>
<td>73%</td>
<td>75%</td>
</tr>
<tr>
<td>SR-HP1.12 All part-time workers are paid more than the nationally or regionally established minimum wage</td>
<td>76%</td>
<td>39%</td>
<td>77%</td>
</tr>
<tr>
<td>SR-HP1.13 All temporary/seasonal workers are paid more than the nationally or regionally established minimum wage</td>
<td>82%</td>
<td>67%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Table 27: Percentage of Mills Paying Above the Minimum Wage, FY08-FY10

<table>
<thead>
<tr>
<th>Worker Type</th>
<th>Dry</th>
<th>Wet</th>
<th>Wet and Dry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
<td>FY09</td>
<td>FY10</td>
<td>FY08</td>
</tr>
<tr>
<td>Full-Time</td>
<td>2,435</td>
<td>2,649</td>
<td>2,331</td>
<td>876</td>
</tr>
<tr>
<td>Part-Time</td>
<td>721</td>
<td>179</td>
<td>371</td>
<td>295</td>
</tr>
<tr>
<td>Temporary/Seasonal</td>
<td>8,326</td>
<td>3,891</td>
<td>4,132</td>
<td>7,423</td>
</tr>
<tr>
<td>Total</td>
<td>11,482</td>
<td>6,719</td>
<td>6,834</td>
<td>8,594</td>
</tr>
</tbody>
</table>

Table 28: Number of Mill Workers Earning Wages Exceeding the Legal Minimum

Across the three years, over half of the workers received wages that exceeded this minimum. (See Table 27.) Across the categories of mills and workers types, the percentage of mills paying wages exceeding the legal minimum was highest in FY08 when compliance rates ranged from 82% for full-time workers to 80% for temporary/seasonal workers. The lowest compliance rates tended to occur in FY09, and the lowest was for wet mills employing part-time workers (39%).

Based on these compliance rates, 23,871 workers received wages that exceeded the legal minimum for FY08, 10,144 in FY09 and 15,290 in FY10. (See Table 28.)
6.3.3. Worker Benefits

- Number of workers receiving legally mandated benefits
- Number of full-time workers receiving pension plans that exceed the national standard
- Number of workers receiving paid sick leave
- Number of workers receiving paid vacation
- Percentage of mills where hours worked by employees did not exceed legal requirements

Legally mandated benefits: A high percentage of mills provided legally mandated benefits to their workers, although not all were meeting government regulations in this regard. (See Table 29.) The only case where some mills had 100% compliance was for full-time workers employed on mills doing both wet and dry processing verified for FY08 and FY09, and for part-time workers on all dry mills verified during the three-year time frame and mills doing both wet and dry processing verified for FY09. Wet mills tended to have lower compliance rates than either dry or wet/dry mills. This was especially the case in FY09 where only 67% provided these benefits to either full- or part-time workers. More generally, compliance rates for all three indicators tended to be higher in FY08 than in subsequent years.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP1.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If nationally legally mandated benefits are required for full-time workers, then these are paid by employer</td>
<td>96%</td>
<td>82%</td>
<td>88%</td>
</tr>
<tr>
<td>SR-HP1.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If nationally legally mandated benefits are required for part-time workers, then these are paid by employer</td>
<td>95%</td>
<td>82%</td>
<td>93%</td>
</tr>
<tr>
<td>SR-HP1.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If nationally legally mandated benefits are required for seasonal/temporary workers, then these are paid by employer</td>
<td>83%</td>
<td>86%</td>
<td>79%</td>
</tr>
</tbody>
</table>

Table 29: Percentage of Mills Providing Workers Legally Mandated Benefits

These compliance rates translate into 26,154 workers in FY08 receiving these benefits, 12,671 in FY09 and 17,353 in FY10. The majority of these workers were temporary/seasonal workers employed by dry mills.

Eight countries (Bolivia, Brazil, East Timor, El Salvador, Ethiopia, Panama, Rwanda and Zambia) had all of the mills verified over the course of the three years providing legally mandated benefits to full-time workers. Five of these maintained these high compliance rates for part-time workers (although Ethiopia had no mills employing part-time workers). Finally, four countries (El Salvador, Ethiopia, Panama and Rwanda) had 100% compliance for all mills for three categories of workers where applicable.

Pension plans: Between 27 and 29% of full-time workers at mills received pension plans that exceeded legal requirements over the three years. FY10 saw the highest levels and FY09 the lowest. Wet mills were slightly less likely than dry mills to provide these benefits to full-time workers, with compliance rates ranging from 16 to 24%, whereas dry mills had compliance rates of 30-36%. Based on these rates, 2,489 full-time workers received pension plans exceeding the legal requirements in FY08, while 2,129 and 1,868 received them in FY09 and FY10, respectively. The only data trend evident is that wet/dry mills had highest levels of compliance in FY08 and this rate declined to 46% in FY09 and 34% in FY10.

Paid sick leave: Most mills provided full-time workers with paid sick leave. The compliance rates for this indicator remained relatively steady at between 89 and 90% across the three years when looking at aggregate rates across all mills. Dry mills and wet/dry mills were more likely to provide this benefit to full-time workers than wet mills, as the latter had compliance rates ranging from 85 to 83% compared to 94-97%. Mills doing both wet and dry processing outperformed those doing either wet or dry milling and represented the only instance where 100% complied with this indicator (in FY09). When looking at whether the mills extended the paid sick leave benefits to all workers, the compliance rates drop significantly for wet mills and dry mills, but drop only slightly for those doing both types of processing. (See Figure 34.) Wet mills and dry mills each saw compliance rates rising consistently from FY08 to FY10. The largest gain was for dry mills, which had 50% compliance in FY08 and 72% in FY10.
Based on these compliance rates 17,504 workers received paid sick leave in FY08, 8,044 in FY09 and 16,953 in FY10. (See Table 30.)

<table>
<thead>
<tr>
<th>Worker Type</th>
<th>Dry FY08</th>
<th>Dry FY09</th>
<th>Dry FY10</th>
<th>Wet FY08</th>
<th>Wet FY09</th>
<th>Wet FY10</th>
<th>Wet &amp; Dry FY08</th>
<th>Wet &amp; Dry FY09</th>
<th>Wet &amp; Dry FY10</th>
<th>Total FY08</th>
<th>Total FY09</th>
<th>Total FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>3,230</td>
<td>3,256</td>
<td>3,490</td>
<td>1,052</td>
<td>1,091</td>
<td>1,026</td>
<td>1,091</td>
<td>1,122</td>
<td>1,091</td>
<td>5,373</td>
<td>4,034</td>
<td>5,638</td>
</tr>
<tr>
<td>All Workers</td>
<td>7,587</td>
<td>4,917</td>
<td>8,178</td>
<td>1,347</td>
<td>2,199</td>
<td>1,670</td>
<td>1,091</td>
<td>1,122</td>
<td>1,199</td>
<td>17,504</td>
<td>8,044</td>
<td>16,953</td>
</tr>
</tbody>
</table>

Table 30: Number of Workers Receiving Paid Sick Leave, FY08-FY10

Annual Leave (Vacation): Between 85 and 90% of all mills verified over the course of the three years had an annual leave (vacation) program that met applicable laws. In FY08 and FY10, 90% of mills had these programs in place, but in FY09 only 85% did. This resulted in 5,697 full-time workers receiving paid annual leave in FY10 and this was the highest number across all three years, as FY08 had only 5,352 and FY09 had even fewer at 4,272.

Data for the different mill categories shows that dry mills and mills doing both wet and dry processing had higher compliance rates than wet mills. All dry mills verified for FY09 had vacation programs in place and this was the only case where this occurred. Wet mills verified for FY09 had the lowest compliance rate at 70%. There was no consistent trend for any of the mill type categories, however.

Hours worked per week: The vast majority of mills ensured that workers did not exceed the number of total hours worked per day or per week set forth in any applicable laws. Across all mills compliance rates ranged from a low of 88% in FY09 to a high of 96% in FY10. Wet mill compliance ranged from 81% in FY09 to 97% in FY10. Dry mills had a smaller range of compliance across the years with 87% of mills meeting these regulations in FY09 compared to 94% in FY10. Finally, 90-97% of wet/dry mills also complied with this indicator.

6.3.4. Worker Living Conditions

- Number of mills offering housing to a portion of their workers
- Number of workers with access to potable water
Housing: Between 56 and 69% of all the stand-alone mills verified for any given year provided housing for some workers. As a proportion of the mills verified per year, wet/dry mills were more likely to provide housing for at least some of their work force, especially in FY09 when 83% reported against this indicator. Only 33 to 38% of the dry mills verified provided housing for workers compared to 52-79% of wet mills. Of those that did provide housing for workers, in most cases over 90% ensured that these met minimal standards to be deemed “habitable.” The only exception to the 90% to 100% range was for wet mills verified for FY09 in which only 86% were in compliance. Wet mills generally had lower compliance rates than dry and wet/dry mills. The only clear trend line from the data shows that the percentage of wet/dry mills complying with this indicator peaked in FY08 and steadily fell as verifications took place in subsequent years, although in this case the drop was only from 100 to 98%.

Access to potable water: The majority of workers on mills had access to potable water, but between 8 and 31% did not. In FY09 only 69% of mills complied with this indicator compared to 87% in FY08 and 92% in FY10. In no instance did a category of mill achieve 100% compliance with this indicator, but the set of wet/dry mills verified for FY08 came the closest at 98% compliance. This was followed by a compliance rate of only 35% for wet/dry mills in FY09, and exceedingly low level when compared to the rates of over 84% for all other mill types across all years. Across all three of the mill categories those mills verified for FY09 had the lowest compliance rates compared to FY08 and FY10.

6. 3. 5. Access to Education

- Percentage of mills located in areas with insufficient access to education providing primary or secondary education to children of workers living on site

- Percentage of mills located in areas with convenient access to education supporting schools through in-kind or financial support

- Percentage of mills providing direct incentives for education

Mills in locations with insufficient access to education: Based on reporting rates for indicator SR-WC2.1 and 2.2 which assesses whether mills provided primary and secondary education materials, we can generate rough estimates of the number of farms that were in locations that lacked access to primary or secondary education, respectively. These figures show that roughly 38%, 13% and 19% of mills verified for FY08, FY09 and FY10, respectively were in locations where there was not sufficient access to primary schools for children of workers. In terms of secondary schools, these figures were 32% in FY08, 8% in FY09 and 15% in FY10. For both the primary and secondary school indicators the percentage of mills in these locations was highest in FY08 and lowest in FY09. There was little variability in the percentages across the three categories of mills.

Access to supplementary education where no local school is available: In cases where a mill was located in a site without sufficient access to primary schools the overwhelming majority provided these services to the schoolchildren of workers living on site. All dry and wet/dry mills complied with this indicator at 100% compliance across all three years, while wet mills saw 100% compliance in FY09 and 98% compliance in the other two years. All of the dry mills verified for this time period also provided supplementary education services meeting national requirements to schoolchildren of secondary school age. Wet mills and wet/dry mills had slightly lower compliance rates ranging from 85 to 95% and 88 to 95%, respectively. In both cases the mills verified for FY09 had the highest compliance rates.

In-kind or financial support to local schools: Globally, 57-65% of mills verified over the three years have supported local schools through either in-kind or direct financial support. Dry mills were the least likely to provide this support, with compliance rates of only 35-42%. Wet/dry mills were the most likely to support local schools in this way, as 84% complied with this indicator in FY08 and FY10, and 92% complied in FY09. Mills verified for FY09 had the highest compliance rates for each mill category.

Direct incentives for education: A number of mills have provided scholarships, educational materials, books, transportation, food or other services as direct incentives for education. In FY08 and FY10, over half of the mills reporting on this indicator provided some sort of direct incentives for education (53% and 52%, respectively). This figure was slightly less – at 40% – in FY09. Wet mills were more likely to provide these incentives than dry mills. For wet/dry mills the rates varied considerably from year to year: 74% in FY08, 26% in FY09 and 58% in FY10.
6. 3. 6. Access to Medical Care

- Percentage of mills with convenient access to public medical care
- Percentage of mills supporting local medical facilities through in-kind or financial support
- Percentage of mills offsetting the cost of health services for workers

Convenient access to medical care: Although the number of mills verified for each year varied, the number located in areas lacking convenient access to medical care stayed relatively stable. In FY08, 155 mills lacked access to medical care – a figure that rose to 218 in FY09 and then dropped to 197 in FY10. In FY09, the year in which the fewest mills underwent verification, the 218 mills represented 49% of the population, which was significantly higher than in FY08 (16%) or FY10 (25%).

In-kind or financial support to medical facilities: Neither wet nor dry mills located in areas with convenient access to medical care were very likely to provide in-kind or financial support to these facilities. Wet mills were slightly more likely provide this support than dry mills, as their compliance rates ranged from 36% to 44%, while dry mill compliance rates only reached the high 20s. Mills doing both wet and dry processing were the most likely to provide support to medical facilities and in FY09 all of those verified were providing some support. This was significantly higher than the rates for FY08 and FY10 when 62% and 63%, respectively, provided any support to local facilities.

Offsetting costs of health services: The C. A. F. E. Practices program includes two indicators used to determine the level to which mills are offsetting the costs of health services. The first looks at whether they are providing these benefits to full-time employees and the second looks at whether they extend them to all workers employed by the mill. Mills had relatively high compliance rates when the indicator was limited to only full-time workers, with most mill categories achieving over 88% compliance. The only exception was for wet mills verified for FY09, when compliance was only 65%. Mills doing both wet and dry processing were the most likely to provide these benefits to full-time workers and extend them to all workers. (See Figure 35.) Over the three years the compliance rates for dry mills extending these benefits to all workers increased steadily from 50% in FY08 to 86% in FY10.

![Figure 35: Percentage of Mills Offsetting the Costs of Health Services for Workers, FY08-FY10](image)
6. 4.  **Wet and Dry Mills - Social Responsibility Conclusions and Recommendations**

Stand-alone mills performed extremely well for the set of minimum labor standards that serve as zero-tolerance indicators for the C. A. F. E. Practices program. However, over the three-year time frame, 67 mills failed to comply with at least one of the minimum labor standards resulting in 72 incidents of non-compliance across the seven indicators. The majority of these incidents occurred when wet mills failed to pay workers the nationally or regionally established minimum wage. Although there were some incidents of non-compliance with these minimum labor standards, the ability of verifiers to uncover these at participating stand-alone mills lends credibility to the C. A. F. E. Practices verification process.

Even though some mills failed to pay workers the minimum wage, over half of the mills verified for each year paid workers wages that exceeded the legal minimum and over a quarter provided full-time workers a pension plan that exceeded legal requirements. This analysis also shows that most mills (89-90%) provided full-time workers with paid sick leave.

Mills participating in C. A. F. E. Practices also made key contributions to education. More specifically, all wet and dry mills located in areas with insufficient access to primary education provided these services to schoolchildren living on site, and over half of all mills verified have supported local schools through either in-kind or direct financial support.

There were also a few areas where mill performance might be improved. For instance, although a high percentage of mills provided legally mandated benefits to their workers, not all were meeting government regulations in this regard. In addition, neither wet nor dry mills located in areas with convenient access to medical care were very likely to provide in-kind or financial support to these facilities. Finally, between 8 and 31% of mills lacked potable water for workers in any given year.

6. 5.  **Coffee Processing – Environmental Responsibility**

Coffee processing can take many different forms, but involves both wet and dry milling to remove the pulp and parchment hulls from the coffee cherry. The C. A. F. E. Practices program includes a unique set of 34 indicators used to verify the environmental practices used by wet and dry mills. Of these, 26 apply to wet mills and eight to dry. In some countries, small farms conduct wet milling on the farm, and where this is the case, nine of the 26 wet-milling indicators are applied to the farms sampled within the application. As noted above, the results of the small-farm wet mill verifications undergo extrapolation to the population of farms within the application that have reported conducting wet milling on the farm.

Key environmental issues associated with milling include water use and discharge, management of waste by-products and the sourcing and conservation of energy to fuel the mills.

6. 5. 1.  **Wet Coffee Processing**

Each country with coffee producers participating in C. A. F. E. Practices also has some type of wet-milling facility that undergoes the verification process. Wet mills assessed against the environmental indicators may take the form of small farms processing coffee on site, stand-alone wet mills located on a medium or large farm or as part of a cooperative, coffee trading company or other entity, or stand-alone mills that do both wet and dry processing. The North and Central America region and Asia had the largest portion of wet mills verified through the program during the FY08-FY10 period. (See Table 31.) North and Central America also had significantly more stand-alone mills verified for FY08 and FY10 than the other regions. During FY09, however, South America and Africa had the highest proportion of wet mills undergoing verification (n=91 and 84, respectively).

While all countries had some stand-alone mills, only a sub-set had small farms conducting some wet milling on the farm. Eight of the 20 countries participating in the program had some small farms verified against the wet-milling indicators: Colombia, Costa Rica, Guatemala, Honduras, Indonesia, Mexico, Nicaragua and Peru. Eleven countries had at least one mill that did both wet and dry processing.
Table 31: Number of Wet Mills Verified, FY08-FY10

<table>
<thead>
<tr>
<th>Region</th>
<th>Wet - Stand-alone</th>
<th>Wet - Small farms</th>
<th>Wet and Dry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY08</td>
<td>FY09</td>
<td>FY10</td>
<td>FY08</td>
</tr>
<tr>
<td>Africa</td>
<td>91</td>
<td>81</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Asia</td>
<td>60</td>
<td>4</td>
<td>15</td>
<td>2,763</td>
</tr>
<tr>
<td>North &amp; Central America</td>
<td>485</td>
<td>52</td>
<td>305</td>
<td>8,792</td>
</tr>
<tr>
<td>South America</td>
<td>76</td>
<td>91</td>
<td>156</td>
<td>23,185</td>
</tr>
</tbody>
</table>

6. 5. 1. 1. Water Conservation

- Percentage of wet mills that have reduced their water use
- Percentage of mills recycling water
- Percentage of mills achieving a coffee cherry/water ratio of less than 1:1
- Percentage of mills conducting water testing
- Percentage of mills producing no negative impact results from wastewater management
- Percentage of mills that have evidence of no contamination of water bodies from processing

Most of the indicators within the wet-milling section focus on freshwater conservation by encouraging efficient use of water and effective management of wastewater produced through the process. This section looks at compliance rates for these indicators.

Recoding and reducing water use: The first five indicators in the water conservation section focus on minimizing water consumption during the wet-milling process. Three of these apply to both small farms and stand-alone mills processing at least 7,500 pounds of green coffee per year: tracking and recording total water use, demonstrating a decline in water use per unit over time and meeting a threshold of a 1:1 ratio for water and coffee cherry. Given the processing volume threshold established, a relatively small proportion of small farms reported on this set of indicators (15-29%).

Stand-alone mills were more likely to track and record water use for wet milling in FY08 and FY10, but in FY09, compliance rates for small farms and wet farms were equal at 31%. By contrast, small farms verified for FY08 and FY10 had rates of only 12% and 14%, respectively. In FY08, 52% of stand-alone mills tracked and recorded water use, and this was the high across all three years. Although small farms were often less likely to track and record water use, verifiers noted that they did show a decrease in the amount of water used on a per-unit basis over time. Although there is no consistent trend, FY10 did have the highest level of compliance for small farms conducting wet milling, with 64% increasing their overall water-use efficiency. This was up from 32% in FY09 and 42% in FY08. Stand-alone wet mills verified for FY10 also had the highest compliance rate (46%) across all three years.

Water recycling: This indicator applies only to stand-alone mills and across the three years of verifications over half of the mills complied with this practice. Compliance rates increased from 54% in FY08 to 63% in FY10 and showed a steady increase over time.

Water testing: This indicator applies to any wet-processing facility that discharges wastewater to a watercourse or sewer to determine whether the farm or mill conducted water tests at all exit points on a monthly basis for biological oxygen demand, chemical oxygen demand and pH levels. Small farms showed an increasing level of compliance across the three years of verifications, moving from 22% in FY08 to 46% in FY09 and 78% in FY10. This is a significant change over the course of the three years towards increasing the number of small farms participating in the program undertaking this level of water quality monitoring. For stand-alone wet mills the compliance rates ranged from 37% in FY08 to 46% in FY09.

No evidence of negative impacts from wastewater: Results from the verification reports show a consistent, high level of small farms and stand-alone mills managing wastewater from pulping and washing in a way that does not
Impact the local or surrounding environment. Small-farm compliance rates ranged from 72% in FY08 to 91% in FY09. Stand-alone mills also had the highest rate of compliance in FY09 when 91% of the mills effectively managed wastewater to control against environmental impacts, compared to 81% in FY08 and 85% in FY10. An additional indicator used in stand-alone mill verifications looks for evidence of contamination from processing operations to neighboring or local water bodies. Compliance was consistently between 80 and 90% across all three years of verifications (80% in FY08, 90% in FY09 and 82% in FY10).

6. 5. 1. 2. Waste Management

- Percentage of mills employing worm composting
- Percentage of mills re-using organic by-products as soil amendment
- Percentage of mills effectively managing wastes to protect the environment

The organic matter produced as part of the wet-milling process has the potential to contaminate waterways and the surrounding environment. For this reason, the C. A. F. E. Practices program assesses how wet mills manage these by-products through best practices that compost and reuse the materials to amend soils. Three of the four indicators in this section apply to small farms, as well as stand-alone mills.

Composting and reuse of organic matter: Worm composting of skin, pulp, mucilage and unacceptable cherries was quite common across the small farms and stand-alone mills verified for the program over the three years. This practice was applied most for those farms and mills verified for FY09, with 95% and 96% complying, respectively. The small-farm rate in that year was much higher than that of FY08 when only 68% practiced worm composting of these wastes and also slightly higher than the 89% complying in FY10. For stand-alone mills the lowest rate occurred in FY08, when 88% practiced worm composting.

Both small farms and stand-alone mills were extremely likely to use organic by-products from the milling process as soil amendment. For small farms 91% to 99% have adopted this practice. Stand-alone mills showed equally high adoption rates of between 95% and 98%. In both cases the highest rates of compliance occurred for farms and mills verified for FY09.

The vast majority of small farms and stand-alone mills managed processing wastes without contaminating the local environment. There was little variation between small farms and mills for this indicator, with the former having a range of 84% to 95% and the latter 90-94%. In both cases the highest compliance rates occurred in FY09 and the lowest in FY08.

6. 5. 1. 3. Energy Conservation

- Percentage of mills that have reduced energy use
- Percentage of mills with commitments to production and/or purchase of renewable energy
- Percentage of mills using wood to dry coffee
- Percentage of mills using responsible wood sources to dry coffee

The energy conservation section of the mill guidelines encourages energy efficiency, use of renewable sources and energy production operations operated in accordance with local permitting requirements regarding emissions standards. More particularly they verify whether mills report on the use rates, and reduce energy consumption per unit of production over time, that any wood used to fuel the mill comes from minimal-impact harvesting or shade-tree prunings and that the mill has a commitment to renewable energy and operates in accordance with local permits. The only indicator applied to small farms for this section of the scorecard verifies whether parchment coffee is patio dried or dried in other energy-efficient ways.
Reducing energy use: Of those wet mills that did use an energy source in the wet-milling process, only a small proportion showed an increase in efficiency over time. Mills verified for FY08 had the highest compliance at 34% and those in FY09 had the lowest performance, with only 21% reducing their energy consumption.

Renewable energy commitments: Over half of the wet mills verified during the FY08-FY09 period showed a commitment to renewable energy use by purchasing renewable energy to fuel the process. The highest rate of compliance (64%) occurred in FY09 and the lowest in FY08 (53%).

Wood fuel sourcing: The percentage of wet mills using wood as a fuel source was relatively low across all three year but showed a steady increase, from 31% in FY08 to 33% in FY09 and 39% in FY10. For those mills using wood as a fuel source, recording use varied greatly across the three years. In FY08, 83% recorded the amount of wood used, but in FY09 only 33% followed this practice and in FY09 compliance rates were in the middle of the range at 56%. Compliance rates were much more consistent across the three years for the indicator used to determine whether the wood used came from pruning of shade trees, responsibly managed forests or other minimal-impact harvest. Of those mills using wood as a fuel source, 99% ensured this practice was met in FY08 and FY09, and in FY10 98% were in compliance.

6.5.2. Dry Coffee Processing

The number of dry mills verified per year was relatively consistent at between 213 and 260. (See Table 32.) The vast majority of mills verified for FY08 and FY10 were those doing only dry milling on the premises, but in FY09 over half of the dry mills verified were those doing both wet and dry coffee processing.

Key environmental issues associated with dry milling are energy efficiency and sourcing. Some dry mills rely on wood to fuel the dryers and the C. A. F. E. Practices program encourages sustainable harvesting of wood where this is the case. In addition, the large quantities of parchment hulls generated require effective waste management and can serve as a potential energy source. This section looks at dry mill performance against the waste-management and energy-conservation indicators.

<table>
<thead>
<tr>
<th>Region</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>26</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Asia</td>
<td>97</td>
<td>19</td>
<td>73</td>
</tr>
<tr>
<td>North &amp; Central America</td>
<td>109</td>
<td>28</td>
<td>102</td>
</tr>
<tr>
<td>South America</td>
<td>25</td>
<td>157</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>260</td>
<td>213</td>
<td>215</td>
</tr>
</tbody>
</table>

Table 32: Number of Dry Mills Verified, FY08-FY10

6.5.2.1. Waste Management

- Percentage of mills reusing parchment hulls

Reuse of parchment hulls: The only waste-management indicator applicable to dry mills looks at the management of parchment hulls from the milling process and whether the mills reused these as fuel or for another beneficial purpose. The vast majority of dry mills reused parchment hulls in some beneficial way. In FY09, 99% of the mills complied with this indicator and this was the highest rate across all three years. The lowest rate of 95%, still very high, occurred in FY08.

6.5.2.2. Energy Conservation

- Percentage of mills that have reduced energy use
- Percentage of mills with commitments to production and/or purchase of renewable energy
• Percentage of mills using wood to dry coffee

• Percentage of mills using responsible wood sources to dry coffee

Recording and reducing energy use: The vast majority of dry mills verified for FY08 and FY10 reported on the total and per-pound quantity of energy used. Compliance was the highest in FY08 at 92%, but a little lower in FY10 at 85%. In FY09, significantly fewer dry mills tracked and reported on energy use, with just under half (49%) complying with this practice.

Renewable energy: Most dry mills demonstrated a commitment to renewable energy by purchasing renewable energy to fuel the mills. Those verified for FY09 had the highest adoption of renewable energy at 84%. Rates were lowest in FY08, at just 62%, but still represented over half of the mills reporting on the indicator.

Sustainable wood sourcing: Between 22 and 24% of dry mills used some wood to fuel the dryers over the three years. For those that did use wood, steps were taken to ensure it was sustainably harvested. In FY09 and FY10, all of the mills using wood complied with the indicator on sustainable sourcing of the wood, while in FY08 the compliance rate was still high at 98%.

6.6 Coffee Processing – Environmental Responsibility Conclusions and Recommendations

The majority of mills and small farms processing coffee as part of the C. A. F. E. Practices program have adopted best practices to manage wastes generated through this process. For instance, the vast majority of small farms and stand-alone mills managed processing wastes without contaminating the local environment. There was little variation between small farms and mills for this indicator among the different types of mills. One common practice adopted to effectively manage wastes generated via the milling process was worm composting, with at least 68% of farms adopting this practice. Reusing the organic by-products as a soil amendment was even more common, with adoption rates of over 90%. Dry mills also were extremely likely to reuse parchment hulls in some beneficial way.

Results from the verification reports also show a consistent, high level of small farms and stand-alone mills managing wastewater from pulping and washing in a way that does not impact the local or surrounding environment. In addition, the percentage of small farms testing wastewater discharges has seen a consistent increase over time from 22% in FY08 to 46% in FY09 and 78% in FY10. This is a significant, very encouraging trend among small-scale producers and could result in improved water quality in coffee watersheds.

Mills also took precautions in sourcing wood to fuel wet and dry mills where this type of fuel was used. Over 98% of all the dry mills using wood ensured that it was sourced from coffee prunings or well-managed forests, and for wet mills the rates were similar.

One area for potential improvement and supplier development among mills is in reducing overall energy use among wet mills, as only a small proportion of those verified showed an increase in efficiency over time (at or below 34%).
7. Conclusions and Recommendations

The assessment conducted in FY08 of the C. A. F. E. Practices program was the first comprehensive analysis of the program and established a baseline from which to benchmark performance over time. This report for FY09 and FY10 is the first for which we have more than one year of data for the farm, mill and PSOs verified through the program and thus presented an opportunity to look at performance trends over time. Although the population of applications, farms, PSOs and mills undergoing verification varies from year to year, the analysis of three years of data enables us to begin identifying how the three years compare to one another. In addition, by using the legacy files for applications that underwent re-verification during this period, we can begin to understand whether or not suppliers remaining in the program are adopting more practices over time and achieving higher approval status and/or application level scores.

Due to only a small number of applications requiring re-verification in FY09 and the relatively small number of new applications in that year, most of the results show FY09 as one in which performance rates are either above or below both FY08 and FY10. It will be interesting to see how these trends change in FY11 when more of the applications verified for FY08 will need to undergo re-verification to remain eligible to sell coffee to Starbucks through the program. Although the population of verifications did vary from year to year, this analysis has identified several areas where performance has been high among suppliers participating in the program, as well as areas where further supplier-development efforts may be warranted to enable farms, mills and PSOs to improve performance over time. Key highlights from the analysis include:

7.1. Applications

- The extent of the C. A. F. E. Practices program is broad – across three continents and 20 countries, many of which overlap with regions of global biodiversity importance.

- Thirty percent of the applications re-verified between FY08 and FY10 improved their approval status by at least one level as a result of the subsequent verification.

- Average application scores increased by 27 percentage points between FY06 and FY10.

- The number of applications receiving a non-compliant status decreased by 92% over the three years and there was a 112% increase in the number achieving strategic status over the past five years.

- The continued ability of the C. A. F. E. Practices program to detect instances of non-compliance with the zero-tolerance indicators relating to payment of minimum wage and employment of minors under the age of 14 is a compliment to the strength of the verification process.

7.2. Farms and Producer Support Organizations

- Although the number of applications was fewer in FY09 than in other years, the number of farms represented within these 154 applications was higher than both FY08 and FY10. Thus, some of the applications verified for FY09 contained large numbers of farms representing very large supply chains.

- Small farms of fewer than 12 hectares continue to make up the vast majority of farms participating in the program. A significant portion of these farms also processed coffee, far outnumbering the number of wet mills participating in the program.

- The majority of the farms participating in the program paid workers wages exceeding the legal minimum.

- Every small farm verified through the program from FY08 to FY10 ensured that children attended school.

- Farms are conserving the remaining natural forest areas. Nearly 100% of all farms verified over the FY08-FY10 time period did not convert any natural forest area to agricultural production.
• The vast majority of medium and large farms verified have set aside at least 5% of their land for conservation and most were protecting areas of high ecological value on their farms.

• Only 1-2% of farms are continuing to use chemicals listed as Type 1A and 1B by the World Health Organization.

• Nearly 100% of farms are taking steps to conserve at least 25% of water bodies on the farm from sediments and nutrients.

• Most PSOs were cooperatives, mills or coffee associations, and small farms receiving PSO services from mills had the highest compliance rates across the range of indicators for the FY09-FY10 period.

• Nearly all of the PSOs verified had tracking systems from the point of purchase to point of export, as well as annually updated lists of producers participating in the C. A. F. E. Practices program.

7.3. Mills

• Over half of the stand-alone mills doing wet and/or dry processing paid workers wages exceeding the legal minimum.

• The vast majority of full-time workers employed by mills received paid sick leave.

• Mills made significant contributions to education between FY08 and FY10, with all of those located in areas with insufficient primary education providing these services to the children of workers living at the mill.

• The vast majority of small farms and stand-alone mills are managing processing wastes in a way that does not contaminate the local environment.

• Nearly all of the mills using wood as a fuel source took precautions to ensure that the wood was sourced from coffee prunings and/or well-managed forests.

In addition to identifying the highlights noted above, the analysis also identified the following areas for continued supplier development:

• Within the population of farms that underwent re-verification during the FY08-FY10 time period, 60% improved their total score, 6% had no change and 35% had a decline in total score. These score changes resulted in 10% experiencing a decline in approval status as a result of the second verification and 60% with no change. There is a need to identify what it would take to have the 60% shift to an improved status to guide supplier-development strategies. It is also important to understand what drove the decline in status for the other 10%.

• Starbucks and its suppliers should continue to encourage farms and mills to pay the legal minimum wage to workers on the farm and to also provide the legally required benefits to workers, given that compliance rates in FY10 were relatively low when compared to previous years.

• Small-farm performance showed a strong correlation to that of PSOs, which points to the importance of these service providers in helping to ensure small-farm networks have access to the resources and training needed to improve performance over time.

• Additional awareness regarding the importance of buffer zones protecting water from agrochemical application is needed for the 19-23% of farms that applied chemicals within 10m of water bodies.

• There is significant opportunity to increase the proportion of medium and large farms with monitoring programs in place related to C. A. F. E. Practices performance, as this was the criteria indicator with the lowest level of compliance.
- There may be a need to target technical assistance and training to medium-sized farms on practices related to the conservation of areas of high ecological value, the protection of waterways from agrochemical runoff, as well as in finding and promoting alternatives to WHO Type 1A and 1B chemicals, where between 8% and 21% of farms were not in compliance over the three-year period.

- Small farms could benefit from additional assistance in the adoption of cover crops and leguminous trees to maintain soil fertility over time, as these farms had significantly lower adoption rates for these practices than medium or large farms.

- PSOs should be encouraged to increasingly provide farmers within their networks with a written agreement or identification card upon commitment to comply with C. A. F. E. Practices, as this would help ensure small farms are aware of the program and their own participation within it.

- Ensuring that all mill workers have access to potable water should also be a priority for the program. This would be a major milestone and address the fact that 8-31% of mills verified failed to provide workers with this basic necessity.

- Additional assistance to mills may be necessary to enable further increases in energy efficiency over time, as compliance rates for this indicator were at or below 34% across the three years.

Thus, although there are many areas where applications, farms, PSOs and mills performed well in the program, there are also many opportunities for Starbucks to promote improvements through the program. This is of particular importance as the company works to secure a sustained supply of high-quality, ethically sourced coffee on into the future.
8. Country Results

8.1. Introduction

The VRS dataset allows performance of the various entities that participate in the C.A.F.E. Practices program to further be broken down and analyzed at the country level. Farming practices, environmental conditions, labor standards and other factors can – and often do – vary by country. Analyzing performance within the country scale further contextualizes aggregated global performance figures and trends and provides an important management tool that identifies areas where particular countries perform exceptionally well in the program and where they score less well – allowing Starbucks the opportunity to target resources where they’re needed most.

8.2. Methodology

The results of the country analysis are presented as a series of “dashboards” formatted and organized in the same way and containing the same set of key performance indicators (KPIs) to allow for easy comparison across countries. Similarly to the global analysis, country-level analysis includes only those applications verified for a given fiscal year and does not necessarily include all active participants in that year (see Section 4.1 for further explanation about analysis years), nor does it represent purchases in any given year from a particular country. While performance is compared year over year in each of the country dashboards, the number of farms, mills, & PSOs verified in each of the years can vary greatly. Additionally, the number of farms, mills and PSOs verified in a given year varies greatly across countries.

Results are presented at the application level, as well as for farms, mills and PSOs. Forty KPIs are presented for each country: 22 farm KPIs, 9 mill KPIs, and 9 PSO KPIs (See Tables 33a, b and c). The KPIs were selected by Conservation International and Starbucks and include indicators that have a great degree of variance across countries and/or indicators that are of particular managerial interest for Starbucks. Each KPI is presented as a bar chart with global average performance represented as an asterisk. In some cases, a bar is not visible for a KPI in a particular analysis year; this happens for one of three reasons:

1) There is no data available because the country did not have any applications verified in that fiscal year or because we did not analyze the indicator in the FY08 report;

2) There is no data available because the verifiers found that this KPI was not applicable in all cases where it was assessed; or

3) The rate of compliance was 0%.

In cases 1 and 2, where there is no data available, the bars are replaced with a marker indicating “no data.” Where no marker is visible, data does exist, but the rate of compliance was 0%. In addition, in some instances applications from particular countries only included smallholders who are assessed against a subset of the total indicators in the Generic Scorecard. In these cases, the entire KPI graph I grayed out and marked “not applicable.”

All KPIs are aggregated at the country level and are not broken down by farm size. Additional noteworthy trends and findings not included in the KPI set are included in the “other findings” section. As the focus of this report is on the 2009 and 2010 fiscal years, countries that did not include new applications in either year are omitted.

---

9 There are seven KPIs that we did not analyze in the FY08 report and, as a result, there is no data to report for FY08: SR-HP3.4, SR-WC4.7, CG-SR2.8, CG-SR2.9, CG-WR1.13, CG-WR2.3, and CG-EM1.5.
Table 33a: Farm Key Performance Indicators Used in Dashboard Analysis

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Indicator Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP1.13</td>
<td>All temporary/seasonal workers are paid more than the nationally or regionally established minimum wage. In regions where minimum wages for temporary workers have not been set, all temporary/seasonal workers are paid more than the local industry average. If workers are paid by production, payments exceed the local industry average.</td>
</tr>
<tr>
<td>SR-HP3.4</td>
<td>Hours worked on potentially hazardous activities (e.g., pesticide application, very heavy labor) are restricted in accordance with the law. In regions where such laws are not established such activities are limited to six hours per day.</td>
</tr>
<tr>
<td>SR-WC1.1</td>
<td>CRITERIA REQUIREMENT: Temporary/seasonal, part-time and permanent/fulltime workers living onsite have habitable dwellings.</td>
</tr>
<tr>
<td>SR-WC1.2</td>
<td>CRITERIA REQUIREMENT: All workers have ready access to potable water.</td>
</tr>
<tr>
<td>SR-WC3.6</td>
<td>Employer offsets the cost of health services for all workers.</td>
</tr>
<tr>
<td>SR-WC4.7</td>
<td>Workers utilize appropriate protective equipment when applying agrochemicals and operating machinery. In the case of pesticide application, workers shall use the PPE included in SR-WC4.1. In the case of fertilizer application, workers shall use gloves, protective goggles and rubber boots.</td>
</tr>
<tr>
<td>CG-WR1.2</td>
<td>Buffer zones are maintained adjacent to at least 50% of permanent water bodies (e.g., perennial streams, springs, lakes, wetlands); buffers are at least 2 meters in width (measured horizontally from the high water mark to the base of any coffee tree), exclude all cultivation and are composed of vegetation.</td>
</tr>
<tr>
<td>CG-WR1.13</td>
<td>There is a nursery or contracted source for native vegetation for buffer zones.</td>
</tr>
<tr>
<td>CG-WR2.1</td>
<td>CRITERIA REQUIREMENT: There is no application of agrochemicals within 10 meters of any permanent water body.</td>
</tr>
<tr>
<td>CG-WR2.3</td>
<td>Fertilizer use is minimized in accordance with documented soil requirements.</td>
</tr>
<tr>
<td>CG-CB1.1</td>
<td>CRITERIA REQUIREMENT: Native trees are removed only when they constitute a human hazard or when they significantly compete with coffee plants.</td>
</tr>
<tr>
<td>CG-CB3.10</td>
<td>At least 5% of the total farm area is set aside as a conservation emphasis area.</td>
</tr>
<tr>
<td>CG-EM1.1</td>
<td>CRITERIA REQUIREMENT: Farm does not use pesticides that are listed by the World Health Organization as Type 1A or 1B, except as specified by the nematode amendment.</td>
</tr>
<tr>
<td>CG-EM2.1</td>
<td>Farm implements plan with regular monitoring for insect and disease problems and symptoms of nematode infestation.</td>
</tr>
<tr>
<td>CG-EM2.4</td>
<td>CRITERIA REQUIREMENT: Farm managers implement a monitoring program which tracks farm activities and improvements in C.A.F.E. Practices.</td>
</tr>
<tr>
<td>CG-SR1.2</td>
<td>There is an explicit soil management plan that includes measures to minimize surface erosion.</td>
</tr>
<tr>
<td>CG-SR1.6</td>
<td>All productive area with slopes between 10% and 20% is covered by shade trees and/or cover crops/vegetation.</td>
</tr>
<tr>
<td>CG-SR2.3</td>
<td>All of the productive area is covered by an organic matter layer (composed of dead and decaying biomass) and/or nitrogen-fixing cover crops.</td>
</tr>
<tr>
<td>CG-SR2.8</td>
<td>Soil analysis is conducted annually to identify nutrient deficiencies (macro and micro nutrients) and organic matter content.</td>
</tr>
<tr>
<td>CG-SR2.9</td>
<td>Foliar analysis is conducted annually to identify nutrient deficiencies (macro and micro nutrients).</td>
</tr>
</tbody>
</table>

Table 33b: Mill Key Performance Indicators Used in Dashboard Analysis

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Indicator Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP3.1</td>
<td>CRITERIA REQUIREMENT: All workers do not work more regular hours (i.e., regular hours not including overtime) per day or week than allowable under local laws. In regions where regular hours are not defined, regular hours are defined as 8 hours per day, 48 hours per week.</td>
</tr>
<tr>
<td>SR-HP3.3</td>
<td>All workers must not work more total hours (i.e., total hours including overtime) in one day or week than allowable under applicable laws. In regions where such laws are not established, workers do not work more than 60 hours per week, except where a written agreement exists between workers and management.</td>
</tr>
<tr>
<td>SR-HP3.4</td>
<td>Hours worked on potentially hazardous activities (e.g., pesticide application, very heavy labor) are restricted in accordance with the law. In regions where such laws are not established such activities are limited to six hours per day.</td>
</tr>
<tr>
<td>SR-WC3.6</td>
<td>Employer has a paid sick leave program for all workers.</td>
</tr>
<tr>
<td>CP-WC2.1</td>
<td>CRITERIA REQUIREMENT: Wastewater from pulping and washing is managed in a way that does not impact the local or surrounding environment.</td>
</tr>
<tr>
<td>CP-WM1.1</td>
<td>CRITERIA REQUIREMENT: Processing wastes are managed in such a way as to not contaminate the local environment.</td>
</tr>
<tr>
<td>CP-WM1.2</td>
<td>Skin, pulp, mucilage and unacceptable cherries are composted or processed by worms.</td>
</tr>
<tr>
<td>CP-WM1.3</td>
<td>Organic processing byproducts are used as soil amendments by the farm or, in the case of a standalone processor, distributed to local farmers.</td>
</tr>
<tr>
<td>CP-EC2.4</td>
<td>Wood used for drying coffee comes from pruning of shade trees, responsibly managed forests or other minimal impact harvests (e.g., salvage).</td>
</tr>
<tr>
<td>Indicator</td>
<td>Indicator Text</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>PS-MT1.2</td>
<td>ZERO TOLERANCE: Organization has an annually updated list of producers participating in the C. A. F. E. Practices program.</td>
</tr>
<tr>
<td>PS-MT1.3</td>
<td>ZERO TOLERANCE: Each farm in the supply chain receives a receipt for coffee.</td>
</tr>
<tr>
<td>PS-SPR2.4</td>
<td>Where synthetic fertilizers are used, the Producer Support Organization is implementing its soil and/or foliar testing strategy according to the timeline.</td>
</tr>
<tr>
<td>PS-EM2.1</td>
<td>CRITERIA REQUIREMENT: The Producer Support Organization implements a monitoring program to track farm activities and improvements in C. A. F. E. Practices for more than 5% of the producers in its network.</td>
</tr>
<tr>
<td>PS-EM2.4</td>
<td>The Producer Support Organization holds at least one annual planning meeting(s) to develop a written annual work plan which details which C. A. F. E. Practices activities are to be taken in the coming year.</td>
</tr>
</tbody>
</table>
| PS-EM2.5  | The Producer Support Organization develops a written management plan and supporting documents, including but limited to:  
• A description of the farm production systems and coffee productivity (coffee production per hectare, total annual coffee production) for the association  
• Producer Support Organization farmer training plan  
• Ecological pest & disease management measures  
• Soil quality improvement strategies  
• Producer Support Organization farmer resource sharing |
| PS-EM2.10 | Producer Support Organization has documented materials for training members in its network on: shade management; integrated pest control and disease management; pruning, weeding and cultural management; and processing and drying coffee. |
| PS-CB1.2  | Producer Support Organization has identified resources for the distribution of shade trees or seedlings. |
| PS-CB2.1  | Producer Support Organization maintains a written list of wildlife species native to the region and identified which of those species are classified as vulnerable, endangered or critically endangered according to the IUCN red list (http://www.redlist.org). |

Table 33c: PSO Key Performance Indicators Used in Dashboard Analysis
Bolivia

**Key Performance Indicators**

**FARM DISCUSSION**

*Environmental Responsibility:*
Of those indicators assessed for smallholders, farms reported against most. The performance of farms against the Environmental Responsibility KPIs is extremely strong. Across all KPIs in both FY08 and FY09, farms scored 100% in compliance wherever indicators were applicable. There is not a single instance of a farm out of compliance in either FY08 or FY09, though in many cases indicators were deemed not applicable.

*Social Responsibility:*
Similarly, farms scored at or above the global average against all KPIs in the Social Responsibility section.

**MILL DISCUSSION**

Bolivia’s applications in FY08 and FY09 each included one mill. As with farms, mills performed very well in the C.A.F.E. Practices program. The mills complied with all KPIs deemed applicable in FY08 and FY09. Mills performed at or above the global average against all KPIs.

**PRODUCER SUPPORT ORGANIZATIONS DISCUSSION**

In every indicator applicable to the PSO, it scored 100% compliant. The PSO ranks among the best-performing PSOs in the program, and scored at or above the global average against all KPIs.

**CONCLUSIONS**

Bolivia’s performance in all aspects of the C.A.F.E. Practices program is extremely strong. There are no cases of non-compliance found against any indicator in either year analyzed. Follow-up investigation may be warranted to determine the level of consistency in the manner in which indicators are evaluated in Bolivia compared to other countries in the program to ensure this high level of performance is not due to verifier error.
Coffee Growing KPIs

**Hiring Practices**

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP 1.13</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>SR-HP 3.4</td>
<td>FY08 FY09 FY10</td>
</tr>
</tbody>
</table>

**Wages and Benefits**

**Hours of Work**

**Working Conditions**

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-WC 1.1</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>SR-WC 1.2</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>SR-WC 3.6</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>SR-WC 4.7</td>
<td>FY08 FY09 FY10</td>
</tr>
</tbody>
</table>

**Access to Housing**

**Potable Water**

**Access to Medical Care**

**Worker Safety & Training**

**Water Resources**

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG-WR1.2</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>CG-WR1.3</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>CG-WR2.1</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>CG-WR2.3</td>
<td>FY08 FY09 FY10</td>
</tr>
</tbody>
</table>

**KPI Chart Legend**

- Country % compliant
- Global % compliant
- No data reported

C.A.F.E. PRACTICES PROGRAM FY08 - FY10 | 79
### CONSERVING BIODIVERSITY

- **Maintaining a Coffee Shade Canopy**
- **No Forest Conversion**
- **Conservation Set Aside**

<table>
<thead>
<tr>
<th>Action</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG-CB 1.1</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CG-CB 3.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG-CB 3.10</td>
<td></td>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
</tbody>
</table>

### SOIL RESOURCES

- **Soil Management Plan**
- **Protecting Slopes**
- **Organic Matter Layer**
- **Soil Analysis**
- **Foliar Analysis**

<table>
<thead>
<tr>
<th>Action</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG-SR 1.2</td>
<td></td>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>CG-SR 1.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG-SR 2.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG-SR 2.8</td>
<td></td>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>CG-SR 2.9</td>
<td></td>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL MANAGEMENT

- **Who Chemicals**
- **Regular Monitoring**
- **Monitoring Program**
- **Implementing Management Plan**

<table>
<thead>
<tr>
<th>Action</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG-EM 1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG-EM 1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG-EM 2.1</td>
<td></td>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>CG-EM 2.4</td>
<td></td>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
</tbody>
</table>
Coffee Processing KPIs

**Hiring Practices**
- **Regular Hours**
- **Total Hours**
- **Hazardous Activities**
- **Access to Medical Care**
- **Energy Conservation/Impacts**

**Water Conservation**
- **Reducing Wastewater Impacts**

**Waste Management**
- **No Contamination**
- **Composting**
- **Soil Amendment**

**Producer Support Organizations KPIs**

**Organization Management**
- **Participant List**
- **Provides Receipt**

**Conserving Biodiversity**
- **Maintaining a Coffee Shade Canopy**
- **Protecting Wildlife**

**Environmental Management**
- **Monitoring Plan**
- **Annual Meetings**
- **Management Plan**
- **Training Materials**

**Soil Resources**
- **Maintaining Soil Productivity**

C.A.F.E. PRACTICES PROGRAM FY08 - FY10 | 81
Applications in FY09 consisted of a mix of small, medium and large farms, while in FY10, applications were dominated by large farms and no small farms were verified.

There were no zero-tolerance failures in either FY09 or FY10. In FY09, Brazil's applications scored only verified ratings, but in FY10, there was an increase in the proportion of applicants being awarded preferred and strategic status.

Applications with Zero-Tolerance Instances

<table>
<thead>
<tr>
<th>Year</th>
<th>Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>NA</td>
</tr>
<tr>
<td>FY09</td>
<td>0</td>
</tr>
<tr>
<td>FY10</td>
<td>0</td>
</tr>
</tbody>
</table>

Key Performance Indicators

**FARM DISCUSSION**

**Environmental Responsibility:**

Brazil's farm verifications show increases in compliance rates across nearly all KPIs from FY09 to FY10. One exception is the KPI related to non-use of hazardous pesticides (CG-EM1.1), where compliance dropped slightly from FY09 to FY10. In fact, compliance rates dropped more precipitously on medium and large farms in both years than the overall figure demonstrates. With a global compliance rate near 100%, this KPI is one place Brazil's farms lag when compared to the rest of the globe. In addition, farms score lower than the global average against KPIs related to Farm Management and Monitoring (CG-EM2.1 and 2.4). Farms otherwise score higher than the global average across most coffee-growing KPIs, including all KPIs related to Soil Resources. Farms also scored higher than the global average against two Soil Resources KPIs (CG-SR2.3 and CG-SR2.9).

**Social Responsibility:**

Brazil's farms scored well above the global average against the KPI related to use of protective equipment (SR-WC4.7). Farms score below the global average against KPIs related to Hiring Practices (SR-HP1.13 and 3.4). Farms also lagged behind the global average against the KPI related to access to potable water (SR-WC1.2).

**MILL DISCUSSION**

Applications from Brazil include both stand-alone and on-premises mills. Mills across both categories scored at or above the global average against all KPIs in FY09 and FY10. Most KPIs show slight increases in rates of compliance from FY09 to FY10. Where KPIs applied to both stand-alone and on-premises mills, on-premises mills tended to perform better, though not significantly so. Brazil's mills particularly stand out against KPI SR-WC3.6, related to access to medical care, scoring 20% higher than the global average in both years.

**PRODUCER SUPPORT ORGANIZATIONS DISCUSSION**

Brazil's applications only included PSOs in FY09. Brazil's PSOs scored very high against KPI PS-SR2.4, relating to soil testing, an indicator with comparatively low global performance. PSOs scored below the global average against the KPI relating to the
distribution of shade trees and seedlings (PS-CB1.2). In addition, Brazil’s PSOs scored below the global average against all KPIs related to Environmental Management. For instance, the PSOs all failed to comply with KPIs PS-EM2.1 and 2.5 relating to monitoring and management plans and were below the global average for KPI PS-EM2.4, relating to planning meetings.

OTHER FINDINGS
Farms were also among the top 10% against most Economic Accountability indicators. Rates of compliance increased against most farm indicators from FY09 to FY10 across all size categories. Farms were among the bottom 10% across most indicators related to Maintaining a Coffee Shade Canopy (CG-CB1) in both FY09 and FY10. There is a great deal of variation in rates of performance among size groups.

CONCLUSIONS
Focus on the Environmental Management indicators, with particular attention focused on the Farm Management and Monitoring indicators, could serve to increase rates of compliance in Brazil. Many of the areas in which Brazil’s applications lag the rest of the globe are related to farm management. PSOs were only included in the FY09 dataset, but scores there reiterate that a focus on improved management may represent an opportunity in Brazil.

Coffee Growing KPIs

HIRING PRACTICES

WAGES AND BENEFITS

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR+HP 1.13</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>SR+HP 3.4</td>
<td>FY08 FY09 FY10</td>
</tr>
</tbody>
</table>

HOURS OF WORK

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR+HP 1.13</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>SR+HP 3.4</td>
<td>FY08 FY09 FY10</td>
</tr>
</tbody>
</table>

KPI Chart Legend

- Country % compliant
- Global % compliant
- No data reported

WORKING CONDITIONS

ACCESS TO HOUSING

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-WC 1.1</td>
<td>FY08 FY09 FY10</td>
</tr>
<tr>
<td>SR-WC 1.2</td>
<td>FY08 FY09 FY10</td>
</tr>
</tbody>
</table>

POTABLE WATER

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-WC 3.6-WR2.1</td>
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</tr>
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</table>

ACCESS TO MEDICAL CARE

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-WC 4.7</td>
<td>FY08 FY09 FY10</td>
</tr>
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WORKER SAFETY & TRAINING

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KPI Chart Legend

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- Global % compliant
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WATER RESOURCES

BUFFER ZONES

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NURSERY WITH NATIVE SPECIES

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<td><strong>CG-CB 1.1</strong></td>
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<th><strong>SOIL MANAGEMENT PLAN</strong></th>
<th><strong>PROTECTING SLOPES</strong></th>
<th><strong>ORGANIC MATTER LAYER</strong></th>
<th><strong>SOIL ANALYSIS</strong></th>
<th><strong>FOLIAR ANALYSIS</strong></th>
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<th><strong>REGULAR MONITORING</strong></th>
<th><strong>MONITORING PROGRAM</strong></th>
<th><strong>IMPLEMENTING MANAGEMENT PLAN</strong></th>
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Coffee Processing KPIs

**Hiring Practices**
- Regular Hours
- Total Hours
- Hazardous Activities
- Access to Medical Care
- Energy Conservation/Impacts

**Working Conditions**
- Regular Hours
- Total Hours
- Hazardous Activities
- Access to Medical Care
- Energy Conservation/Impacts

**Water Conservation**
- Reducing Wastewater Impacts

**Waste Management**
- No Contamination
- Composting
- Soil Amendment

**Producer Support Organizations KPIs**

**Organization Management**
- Participant List
- Provides Receipt

**Conserving Biodiversity**
- Maintaining a Coffee Shade Canopy
- Protecting Wildlife

**Environmental Management**
- Monitoring Plan
- Annual Meetings
- Management Plan
- Training Materials

**Soil Resources**
- Maintaining Soil Productivity
Applicants from Colombia have participated in the program throughout the analysis period. Applications are comprised almost entirely of small farms with a few medium and large farms in each fiscal year. Most small farms conduct on-premise processing, while producers in Colombia also use stand-alone milling facilities. Colombia has few zero-tolerance failures and has not had any non-compliant verifications over the assessment period. While the vast majority of applications receive a verified score, there has been some increase in applications receiving a strategic score over the period.

**Key Performance Indicators**

**FARM DISCUSSION**

*Environmental Responsibility:*
Compliance rates increased over the analysis period for both Water Body Protection KPIs (CG-WR1.2 and 1.13). In addition, farms scored at or near the global average against Environmental Management KPIs related to Ecological Pest and Disease Control (CG-EM1.1 and 1.5) and Farm Management and Monitoring (CG-EM2.1 and 2.4). Specifically, farms performed well above the global average against KPI CG-EM2.4, related to implementation of a management plan, in both FY09 and FY10. Farms performed consistently below the global average, however, against Soil Resources KPIs related to Controlling Surface Erosion and Soil Productivity throughout the analysis period.

*Social Responsibility:*
Farms performed well against Working Conditions KPIs related to Access to Housing, Water and Sanitary Facilities (SR-WC1.1 and 1.2) across all three years in the analysis period. However, farms scored consistently below the global average against Hiring Practices KPIs (SR-HP1.13) and Working Conditions KPIs related to Access to Medical Care (SR-HP3.6) and Worker Safety and Training (SR-HP4.7). Compliance against SR-HP4.7 increased over the period, however, though not at the same rate as at the global level. Performance against the KPI related to Access to Medical Care (SR-HP3.4) also declined over the period.

**MILL DISCUSSION**

Stand-alone mills in Colombia tended to perform at, near or below the global average against most KPIs. Stand-alone dry mills failed across the board to comply with the Energy Conservation KPI (CP-EC2.4), an indicator with otherwise very high global performance. Performance of on-premises mills against KPIs related to Water Conservation (CP-WC2.1) and two out of three KPIs related to Waste Management (CP-WM1.1 and 1.2) increased over the analysis period. Stand-alone mills out performed on-premises mills against all relevant KPIs, but also generally performed close to the global average.

**PRODUCER SUPPORT ORGANIZATIONS DISCUSSION**

PSO performance in FY08 was above the global average against most KPIs. In FY09 and FY10, PSOs performed below the global average against KPIs relating to Environmental Management. PSOs performed among the best in the program against KPI PS-MT1.3, relating to receipts for coffee. Contrary to the trend found with farms, performance against the Soil Resources KPI (PS-SR2.4) increased over the assessment period, exceeding the global average.
OTHER FINDINGS
Farms performed among the top 10% against the indicator related to zero-conversion since 2004 (CG-CB3.1) across all three years. There was significant variation in performance rates among size groups; however, there was not a consistent pattern.

CONCLUSIONS
With the majority of applications receiving just a verified rating, there is significant room for Colombia’s participants to take up recommended practices. As a country with a great deal of farming taking place on slopes and relatively low performance against indicators relating to controlling erosion, this may represent an area of focus that would make a difference for farmers in Colombia.

Coffee Growing KPIs

**HIRING PRACTICES**

<table>
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**WAGES AND BENEFITS**

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**HOURS OF WORK**

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**KPI Chart Legend**

- Country % compliant
- Global % compliant
- No data reported

WORKING CONDITIONS

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**ACCESS TO HOUSING**

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**POTABLE WATER**

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**ACCESS TO MEDICAL CARE**

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**WORKER SAFETY & TRAINING**

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**WATER RESOURCES**

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**KPI Chart Legend**

- Country % compliant
- Global % compliant
- On-premises mills
- All mills
- No data reported

**KPI Chart Legend**

- Country % compliant
- Global % compliant
- On-premises mills
- All mills
- No data reported
CONSERVING BIODIVERSITY
MAINTAINING A COFFEE SHADE CANOPY
NO FOREST CONVERSION
CONSERVATION SET ASIDE

SOIL RESOURCES
SOIL MANAGEMENT PLAN
PROTECTING SLOPES
ORGANIC MATTER LAYER
SOIL ANALYSIS
FOLIAR ANALYSIS

ENVIRONMENTAL MANAGEMENT
WHO CHEMICALS
REGULAR MONITORING
MONITORING PROGRAM
IMPLEMENTING MANAGEMENT PLAN
Coffee Processing KPIs

**Hiring Practices**
- Regular Hours
- Total Hours
- Hazardous Activities
- Access to Medical Care

**Working Conditions**

**Energy Conservation**

**Water Conservation**
- Reducing Wastewater Impacts

**Waste Management**
- No Contamination
- Composting
- Soil Amendment

**Producer Support Organizations KPIs**

**Organization Management**
- Participant List
- Provides Receipt

**Conserving Biodiversity**
- Maintaining a Coffee Shade Canopy
- Protecting Wildlife

**Environmental Management**
- Monitoring Plan
- Annual Meetings
- Management Plan
- Training Materials

**Soil Resources**
- Maintaining Soil Productivity
Applications were submitted from Costa Rica throughout all three years of the analysis period. The vast majority of farms in the applications are small farms, with a small number of medium and large farms as well. There has been an increase between FY08 and FY10 in applications receiving a strategic rating. There have been zero-tolerance failures in several applications, but few have resulted in a non-compliance status.

Key Performance Indicators

FARM DISCUSSION

Environmental Responsibility:

Costa Rican farms performed higher than the global average against nearly all KPIs across all Environmental Responsibility categories. The exceptions include performance against a Water Quality KPI (CG-WR2.1), where performance was below the global average all three years, and performance against a Conservation Areas KPI (CG-CB3.10), where performance declined over the three-year period and was at the global average in FY08, but below in FY09 and FY10. In most cases, FY09 represents a peak year.

Social Responsibility:

Costa Rican farms performed at or above the global average against all Social Responsibility KPIs across all three years of the analysis period. Farms scored well above the global average against the KPI related to wages above the national average for temporary workers (SR-HP1.13).

MILL DISCUSSION

Mills in Costa Rica also performed near or above the global average against most social KPIs. Mills performed slightly below the global average against two KPIs related to Hours of Work (SR-HP3.1 and 3.3). Most Costa Rican farms use stand-alone mills, but a few on-premises mills were also included in verifications in FY10. On-premises mills performed near 100% compliance with applicable KPIs. Stand-alone mills performed well, at or above the global average against most environmental KPIs, except a KPI related to reuse of organic by-products (CP-WM1.3), where they performed below the global average.

PRODUCER SUPPORT ORGANIZATIONS DISCUSSION

PSOs performed above the global average against nearly all KPIs, in most cases well above the global average. One exception is related to an Environmental Management and Monitoring KPI (PS-EM2.5) related to a written management plan, where PSOs scored below the global average in FY08 and FY10, but near 100% in FY09.
OTHER FINDINGS
Farms performed consistently well against the Hiring Practices indicators (SR-HP1, 2, 3 and 4), with compliance rates at or near 100% across many indicators in FY09 and FY10. There was little variation in compliance rates among farm sizes against Social Responsibility indicators, with many patterns consistent across farm sizes. Similarly, there was little variation among farm sizes against the Environmental Responsibility indicators, with the exception of the Ecological Pest and Disease Control indicator set (CG-EM1), where there was more variation between medium and large farms than elsewhere.

CONCLUSIONS
Costa Rican applications, farms, mills and PSOs performed consistently strongly across all three analysis years. Without significant variation by farm size, and with a high level of applications receiving a strategic status in FY10, the program seems to be effective in Costa Rica. Areas with lower-than-global-average performance rates are easily identified and may be targeted for focused capacity-building efforts.

Coffee Growing KPIs

HIRING PRACTICES
WAGES AND BENEFITS

HOURS OF WORK

KPI Chart Legend

WORKING CONDITIONS
ACCESS TO HOUSING
POTABLE WATER
ACCESS TO MEDICAL CARE
WORKER SAFETY & TRAINING

WATER RESOURCES
BUFFER ZONES
NURSERY WITH NATIVE SPECIES
AGROCHEMICAL BUFFER
FERTILIZER USE MINIMIZED
### Converting Biodiversity

**Maintaining a Coffee Shade Canopy**

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**Conservation Set Aside**

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### Soil Resources

**Soil Management Plan**

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### Environmental Management

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**Implementing Management Plan**

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Coffee Processing KPIs

### Hiring Practices

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### Waste Management

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### Producer Support Organizations KPIs

### Organization Management

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### Conerving Biodiversity

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### Environmental Management

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<tr>
<td>PS-EM 2.10</td>
<td></td>
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</tbody>
</table>

### Soil Resources

<table>
<thead>
<tr>
<th>Metric</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-SR 2.4</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
East Timor

**Key Performance Indicators**

**FARM DISCUSSION**

*Environmental Responsibility:*
Farms from East Timor tended to perform well against Environmental Responsibility KPIs with global averages above 90%, including KPIs related to Water Quality (CG-WR2.1), Conserving Biodiversity (CG-CB1.1 and 3.1), and one Ecological Pest and Disease Control KPI (CG-EM1.1). However, where KPIs had lower global averages, farms tended to perform well below the global average. In several cases, rates of compliance were below 20% (CG-SR1.6, CG-SR2.3, CG-EM1.5).

*Social Responsibility:*
Farms in East Timor had more varied performance against KPIs in the Social Responsibility section. Farms performed well above the global average against the Wages and Benefits KPI (SR-HP1.13), and above the high global average for Access to Housing, Water and Sanitary Facilities KPIs (SR-WC1.1 and 1.2). However, the farms failed across the board to comply with the Hours of Work KPI (SR-HP3.4).

**MILL DISCUSSION**
East Timor’s mills (all stand-alone), performed well against many Coffee Processing KPIs. The exceptions include a Hiring Practices KPI (SR-HP3.4), related to limiting hours worked on hazardous activities, where farms also failed, and an Energy Conservation KPI (CP-EC2.4), related to use of prunings for fuel, with a rate of 0% compliance.

**PRODUCER SUPPORT ORGANIZATIONS DISCUSSION**
PSOs from East Timor failed against many PSO KPIs, including all Environmental Management KPIs (PS-EM2.1, 2.4, 2.5, and 2.10), the Soil Resources KPI (PS-SR2.4) and the Protecting Wildlife KPI (PS-CB2.1). They complied with KPIs relating to Operational Management and Maintaining a Shade Canopy.

**OTHER FINDINGS**
Farms performed particularly poorly against indicators related to Controlling Surface Erosion (CG-SR1.1), with rates of compliance below 20% across all applicable indicators and high reporting rates. Many indicators were marked as not applicable for farms, leading to many indicators with very low reporting rates.
CONCLUSIONS

Within the sampled group, it is clear that there is room for improvement related to erosion management on farms. PSOs were not in compliance with several indicators, especially those related to environmental management and monitoring and soil resources and focus on improving PSO performance may be an opportunity area.

Coffee Growing KPIs

**Hiring Practices**

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Analysis Fiscal Year</th>
<th>Country % compliant</th>
<th>Global % compliant</th>
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<tbody>
<tr>
<td>SR-HP 1.13</td>
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<td>SR-HP 3.4</td>
<td>FY08 FY09 FY10</td>
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**Working Conditions**

<table>
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**Water Resources**

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<td></td>
</tr>
<tr>
<td>CG-WR2.1</td>
<td>FY08 FY09 FY10</td>
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<td></td>
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<tr>
<td>CG-WR2.3</td>
<td>FY08 FY09 FY10</td>
<td></td>
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</tr>
</tbody>
</table>

KPI Chart Legend

- Country % compliant
- Global % compliant
- No data reported
## Coffee Processing KPIs

### Hiring Practices
- **Regular Hours**
- **Total Hours**
- **Hazardous Activities**
- **Access to Medical Care**

### Energy Conservation
- **Energy Conservation/Impacts**

### Water Conservation
- **Reducing Wastewater Impacts**

### Waste Management
- **No Contamination**
- **Composting**
- **Soil Amendment**

### Producer Support Organizations KPIs
- **Organization Management**
  - **Participant List**
  - **Provides Receipt**
- **Conserving Biodiversity**
  - **Maintaining a Coffee Shade Canopy**
  - **Protecting Wildlife**
- **Environmental Management**
  - **Monitoring Plan**
  - **Annual Meetings**
  - **Management Plan**
  - **Training Materials**
- **Soil Resources**
  - **Maintaining Soil Productivity**
El Salvador

NORTH AND CENTRAL AMERICA

APPROVAL STATUS

FARM SIZE

Applications include a mix of small, medium and large farms. Most applications received a verified status, while some have also received preferred and strategic status in all years. There were some issues with zero-tolerance failures in FY08 and FY10, resulting in a few non-compliant applications in those years.

APPLICATIONS WITH ZERO-TOLERANCE INSTANCES

<table>
<thead>
<tr>
<th>Year</th>
<th>Instances</th>
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<tbody>
<tr>
<td>FY08</td>
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<tr>
<td>FY09</td>
<td>0</td>
</tr>
<tr>
<td>FY10</td>
<td>5</td>
</tr>
</tbody>
</table>

Key Performance Indicators

FARM DISCUSSION

Environmental Responsibility:
Farms from El Salvador are varied in how they perform relative to the global average. Farms perform well above the global average against the Water Body Protection KPI (CG-WR1.2) related to buffer zones, the KPI related to cover crops on mild slopes (CG-SR1.6) and one related to cover crops on productive areas (CG-SR2.3). In these cases, farms performed well above the global average in each analysis year. In other cases, the farms performed well below the global average, including against KPIs related to Water Quality (CG-WR2.1 and 2.3) and one related to conservation set-asides (CG-CB3.10).

Social Responsibility:
Farms performed slightly below the global average for the KPI related to Hours of Work (SR-HP3.4). Rates of compliance were significantly below the global average for the KPI related to access to potable water (SR-WC1.2). Farms complied at rates higher than the global average related to the KPI related to Access to Medical Care (SR-WC3.6).

MILL DISCUSSION
Coffee processing in applications from El Salvador is done exclusively at stand-alone processing facilities. These mills performed well against coffee processing KPIs, with rates of compliance at or above the global average for most KPIs across all analysis years. One exception is for the KPI related to Hours of Work (SR-HP3.4), where farms performed poorly.

PRODUCER SUPPORT ORGANIZATIONS DISCUSSION
PSOs were 100% compliant against Organizational Management KPIs across all analysis years. With the exception of that criteria set, PSOs in FY10 performed below the global average against all KPIs, and in some cases well below. Performance was higher in FY08, though in many cases still below the global average.
OTHER FINDINGS
Farms performed among the top 10% globally for indicators related to child labor, forced labor and non-discrimination (SR-HP4.1-4.4). Farms ranked among the lowest 10% for indicators related to non-use of hazardous pesticides (CG-EM1.1) and safe storage of agrochemicals (CG-EM1.11) and in both cases performance declined from FY09 to FY10. Farms also performed among the lowest 10% for indicators related to Access to Housing, Water and Sanitary Facilities (SR-WC1.2-1.4) in FY08 and FY10. There was not a strong trend that differentiated performance by farm size, but in many cases medium farms lagged behind large farms.

CONCLUSIONS
El Salvador’s applications, farms, mills and PSOs have varied performance in the program with inconsistent trends across years. Across many measures, FY09 represented a particularly good year of performance, with FY10 representing lower rates of compliance than FY08 or FY09. Farms had consistently low rates of compliance against indicators protecting water sources and proper use and management of agrochemicals. Farms and mills also performed poorly against the indicator ensuring workers have access to potable water, indicating a potentially risky situation for worker health.

Coffee Growing KPIs
Coffee Processing KPIs

Hiring Practices

<table>
<thead>
<tr>
<th>Regular Hours</th>
<th>Total Hours</th>
<th>Hazardous Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP 3.1</td>
<td>SR-HP 3.3</td>
<td>SR-HP 3.4</td>
</tr>
</tbody>
</table>

Working Conditions

<table>
<thead>
<tr>
<th>Access to Medical Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF-WC 3.6</td>
</tr>
</tbody>
</table>

Energy Conservation

<table>
<thead>
<tr>
<th>Energy Conservation/Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-EC 2.4</td>
</tr>
</tbody>
</table>

Water Conservation

<table>
<thead>
<tr>
<th>Reducing Wastewater Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-WC 2.1</td>
</tr>
</tbody>
</table>

Waste Management

<table>
<thead>
<tr>
<th>No Contamination</th>
<th>Composting</th>
<th>Soil Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-WM 1.1</td>
<td>CP-WM 1.2</td>
<td>CP-WM 1.3</td>
</tr>
</tbody>
</table>

Producer Support Organizations KPIs

Organizational Management

<table>
<thead>
<tr>
<th>Participant List</th>
<th>Provides Receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-MT 1.2</td>
<td>PS-MT 1.3</td>
</tr>
</tbody>
</table>

Conserving Biodiversity

<table>
<thead>
<tr>
<th>Maintaining a Coffee Shade Canopy</th>
<th>Protecting Wildlife</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-CB 1.2</td>
<td>PS-CB 2.1</td>
</tr>
</tbody>
</table>

Environmental Management

<table>
<thead>
<tr>
<th>Monitoring Plan</th>
<th>Annual Meetings</th>
<th>Management Plan</th>
<th>Training Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-EM 2.1</td>
<td>PS-EM 2.4</td>
<td>PS-EM 2.5</td>
<td>PS-EM 2.10</td>
</tr>
</tbody>
</table>

Soil Resources

<table>
<thead>
<tr>
<th>Maintaining Soil Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-SR 2.4</td>
</tr>
</tbody>
</table>
Applications from Ethiopia have varied considerably over the three years of analysis. Applications in FY08 and FY09 consisted entirely of small farms, while in FY10, the applications included only large farms. From FY08 to FY09, the proportion of applications receiving a verified status increased, while in FY10, the proportion receiving a preferred status increased. There have not been any zero-tolerance failures.

Key Performance Indicators

FARM DISCUSSION

Environmental Responsibility:
There is a great deal of variation in farm performance against Environmental Responsibility KPIs, particularly across analysis years and across farm-size categories. Although farms performed better than the global average for the KPI related to buffer zones (CG-WR1.2) in FY08 and FY09, they performed lower in FY10 and there is a 0% rate of compliance for the KPI related to nurseries for buffer-zone vegetation (CG-WR1.13). Farms also failed with a 0% rate of compliance for the KPI related to foliar analysis (CG-SR2.9) and at 0% against the KPI related to soil analysis in FY08 and FY09 and performed well below the global average in FY10. While farms in FY09 performed well below the global average against the KPI related to minimization of fertilizer use, they performed above the global average in FY10.

Social Responsibility:
No farms in FY10 complied with the KPIs related to Hiring Practices (SR-HP1.13 and 3.4), though in previous years compliance rates were at or near the global average. A similar pattern occurs for the KPIs related to Access to Housing, Water, and Sanitary Facilities (SR-WC1.1 and 1.2). Performance was at 0% against the KPI related to Worker Safety and Training in FY09, but above the global average in FY10.

MILL DISCUSSION
Mills performed at or above the global average against KPIs related to Water Conservation (CP-WC2.1) and most KPIs related to Waste Management (CP-WM1.1 and 1.3). Mills failed across all three analysis years to comply with the KPI related to Energy Conservation (CP-EC2.4) and lower than the global average against the KPI related to Access to Medical Care (SR-WC3.6).

PRODUCER SUPPORT ORGANIZATIONS DISCUSSION
PSOs accompanied applications in FY08 and FY09 only. In those years, the PSOs performed above the global average against KPIs related to Maintaining a Shade Canopy (PS-CB1.2) and one related to Management and Tracking Systems (PS-MT1.3). For several Environmental Management KPIs, PSOs scored below the global average in FY08 and FY09, and no PSOs complied with PS-EM2.4, 2.5, and 2.10 in FY10. No PSOs complied with the KPI related to Maintaining Soil Productivity (PS-SR2.4).
OTHER FINDINGS
Farms performed among the top 10% against many indicators related to Ecological Pest and Disease Control (CG-EM1.1-1.6). There was a great deal of variation in performance between small and large farms. Examples of large differences in compliance rates include indicators related to habitable dwellings and potable water (SR-WC1.1 and 1.2), where small farms performed much better than large farms.

CONCLUSIONS
It is notable that performance varies so significantly between analysis years and by farm size. Evaluation of which indicators may be feasible for different-sized farms to comply with may be an important step in Ethiopia.

Coffee Growing KPIs

HIRING PRACTICES

WAGES AND BENEFITS

HOURS OF WORK

WORKING CONDITIONS

ACCESS TO HOUSING

POTABLE WATER

ACCESS TO MEDICAL CARE

WORKER SAFETY & TRAINING

WATER RESOURCES

BUFFER ZONES

NURSERY WITH NATIVE SPECIES

AGROCHEMICAL BUFFER

FERTILIZER USE MINIMIZED
Coffee Processing KPIs

Hiring Practices

<table>
<thead>
<tr>
<th>Regular Hours</th>
<th>Total Hours</th>
<th>Hazardous Activities</th>
<th>Access to Medical Care</th>
<th>Energy Conservation/Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-HP 3.1</td>
<td>SR-HP 3.3</td>
<td>SR-HP 3.4</td>
<td></td>
<td>CP-EC 2.4</td>
</tr>
</tbody>
</table>

Working Conditions

Water Conservation

<table>
<thead>
<tr>
<th>Reducing Wastewater Impacts</th>
<th>No Contamination</th>
<th>Composting</th>
<th>Soil Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-WC 2.1</td>
<td>CP-WM 1.1</td>
<td>CP-WM 1.2</td>
<td>CP-WM 1.3</td>
</tr>
</tbody>
</table>

Producer Support Organizations KPIs

Organization Management

<table>
<thead>
<tr>
<th>Participant List</th>
<th>Provides Receipt</th>
<th>Conserving Biodiversity</th>
<th>Maintaining a Coffee Shade Canopy</th>
<th>Protecting Wildlife</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-MT 1.2</td>
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<td>PS-CB 1.2</td>
<td>PS-CB 2.1</td>
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Environmental Management

<table>
<thead>
<tr>
<th>Monitoring Plan</th>
<th>Annual Meetings</th>
<th>Management Plan</th>
<th>Training Materials</th>
<th>Soil Resources</th>
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<tbody>
<tr>
<td>PS-EM 2.1</td>
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</tr>
</tbody>
</table>

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Guatemala

NORTH AND CENTRAL AMERICA

Years Active 08 09 10

The makeup of applications in FY08, FY09 and FY10 is consistent in Guatemala. More than a third of applications received a strategic status in each year. A few zero-tolerance incidents occurred in each year, leading to some non-compliant applications, but the proportion of these incidents declined over the course of the analysis period.

Key Performance Indicators

FARM DISCUSSION

Environmental Responsibility:
Farms in Guatemala performed at, near, or above the global average across all analysis years against Environmental Responsibility KPIs, with little exception. One exception is that farms performed slightly below the global average against KPIs relating to Farm Management and Monitoring (CG-EM2.1 and 2.4) in FY10. Farms performed well above the global average against the KPI related to shade and cover crops (CG-SR1.6) and the KPI related to an organic matter layer (CG-SR2.3).

Social Responsibility:
Similarly, farms generally performed at, near, or above the global average across all years against the Social Responsibility KPIs. The exceptions in this case were against the KPI related to habitable dwellings for workers, where farms performed below the global average across all years, and the KPI related to worker safety and training, where farms performed above the global average in FY09, but below in FY10.

MILL DISCUSSION
Stand-alone mills in Guatemala performed above the global average across all KPIs, with several instances of rates of performance significantly above the global average. On-premises mills, which were included in applications in FY08 and FY10, mostly performed at or near the global average. An exception is the indicator related to composting of processing by-products (CP-WM1.2), where on-premises mills performed below the global average in both years.

PRODUCER SUPPORT ORGANIZATIONS DISCUSSION
Several PSOs were included in applications during each of the three years. PSOs generally performed at, near, or above the global average against KPIs. One exception is the indicator related to Maintaining Soil Productivity (PS-SR2.4), where rates of compliance were well below the global average in FY08 and FY10. Rates of compliance were significantly above the global average against KPIs related to planning meetings and management plans (PS-EM2.4 and 2.5).
OTHER FINDINGS
Farms performed particularly well against the indicators related to Freedom of Association (SR-HP2), with many scores among the top 10% globally. Performance across all indicators varied significantly by farm size. In the Environmental Responsibility section, in most cases, small farms scored lowest, with medium farms higher and large farms performing best. In the Social Responsibility section, large farms tended to perform best, with some cases of medium farms scoring better than small farms and some vice versa.

CONCLUSIONS
Performance in Guatemala is strong in most areas. The only areas that stand out for attention or improvement include some drop in performance against the Farm Management and Monitoring KPIs (CG-EM2.1 and 2.4) in FY10 and lower-than-average performance across all analysis years against the Access to Housing, Water and Sanitary Facilities KPI (SR-WC1.1). In addition, the continued discovery of zero-tolerance failures and non-compliant applications is also an area for follow-up.

Coffee Growing KPIs

HIRING PRACTICES

WAGES AND BENEFITS

<table>
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<th>FY09</th>
<th>FY10</th>
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HOURS OF WORK

KPI Chart Legend

WORKING CONDITIONS

ACCESS TO HOUSING

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POTABLE WATER

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ACCESS TO MEDICAL CARE

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WORKER SAFETY & TRAINING

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WATER RESOURCES

BUFFER ZONES

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<tr>
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NURSERY WITH NATIVE SPECIES

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AGROCHEMICAL BUFFER

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FERTILIZER USE MINIMIZED

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<td>CG-WR2.3</td>
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</tbody>
</table>

KPI Chart Legend

Country % compliant On-premise mills
Country % compliant All mills
Global % compliant On-premise mills
Global % compliant All mills
No data reported

KPI Chart Legend
CONSERVING BIODIVERSITY

MAINTAINING A COFFEE SHADE CANOPY

NO FOREST CONVERSION

CONSERVATION SET ASIDE

CG-CB 1.1

CG-CB 1.6

CG-CB 3.1

CG-CB 3.10

CG-SR 1.2

CG-SR 1.6

CG-SR 2.3

CG-SR 2.8

CG-SR 2.9

SOIL RESOURCES

SOIL MANAGEMENT PLAN

PROTECTING SLOPES

ORGANIC MATTER LAYER

SOIL ANALYSIS

FOLIAR ANALYSIS

CG-EM 1.1

CG-EM 1.5

CG-EM 2.1

CG-EM 2.4

ENVIRONMENTAL MANAGEMENT

WHO CHEMICALS

REGULAR MONITORING

MONITORING PROGRAM

IMPLEMENTING MANAGEMENT PLAN
Coffee Processing KPIs

Hiring Practices
- Regular Hours
- Total Hours
- Hazardous Activities
- Access to Medical Care
- Energy Conservation

Working Conditions

Energy Conservation/Impacts

Water Conservation
- Reducing Wastewater Impacts

Waste Management
- No Contamination
- Composting
- Soil Amendment

Producers Support Organizations KPIs

Organization Management
- Participant List
- Provides Receipt

Conserving Biodiversity
- Maintaining a Coffee Shade Canopy
- Protecting Wildlife

Environmental Management
- Monitoring Plan
- Annual Meetings
- Management Plan
- Training Materials

Soil Resources
- Maintaining Soil Productivity
Honduras had applications to the program in FY08 and FY10, but none in FY09. Applications in FY08 and FY10 were made up mostly of small farms (over 75% of farms), with the remainder being medium and large farms. Although non-compliance with zero-tolerance indicators was an issue in FY08, there were no non-compliant applications in FY10. In addition, the proportion of applications receiving a strategic status increased from FY08 to FY10.

Key Performance Indicators

FARM DISCUSSION

*Environmental Responsibility:*
Farms in both FY08 and FY10 performed at or above the global average against most KPIs in the Environmental Responsibility section. Of particular note is that farms performed well above the global average in both years for the Farm Management and Monitoring section (CG-EM2.1 and 2.4). Farms also performed above the global average against the KPI related to cover crops (CG-SR2.3). In one case, against the KPI related to foliar analysis (CG-SR2.9), farms failed across the board, with a compliance rate of 0%. Against the KPI related to application of agrochemicals near water bodies (CG-WR2.1), farms performed above the global average in FY08, but well below in FY10.

*Social Responsibility:*
Farms performed at or above the global average against almost every KPI in the Social Responsibility section in both years. The exception is against the indicator related to access to potable water (SR-WC1.2), where compliance was well below the global average in FY08, but was above the global average in FY10.

MILL DISCUSSION
Mills in Honduras also performed well against KPIs. Stand-alone mills performed at or above the global average against many KPIs. However, in FY10, there was a compliance rate of 0% against the KPI related to Energy Conservation (CP-EC2.4), compared to above-average performance in FY08. In addition, stand-alone mills were somewhat below the global average against Water Conservation (CP-WC2.1) and two Waste Management (CP-WM1.1 and 1.3) KPIs in FY08, but were above the global average in FY10. On-premises mills performed very well against all relevant KPIs in FY10.

PRODUCER SUPPORT ORGANIZATIONS DISCUSSION
While there were several instances of PSO performance below the global average in FY08, by FY10, PSOs performed above the global average against nearly all KPIs. One exception is against the Maintaining Soil Productivity KPI (PS-SR2.4), where performance was below the global average in both FY08 and FY10.
OTHER FINDINGS
Farms performed mid to low against the indicators related to Water Body Protection (CG-WR1), with several among the bottom 10%. Farms performed among the top 10% against Economic Accountability indicators and among Criteria Requirements in the Freedom of Association (SR-HP2) and Hours of Work (SR-HP3) indicator sets. Farms also performed among the top 10% against indicators related to Controlling Surface Erosion.

CONCLUSIONS
Performance in the C.A.F.E. Practices program is strong in Honduras and status levels have increased across the analysis years. Continued attention to soil productivity and water-conservation practices may be warranted, given some of the FY10 compliance rates. Focus on adoption of more advanced indicators may prove to increase approval-status levels in future years.

Coffee Growing KPIs

HIRING PRACTICES

WAGES AND BENEFITS

HOURS OF WORK

KPI Chart Legend

WORKING CONDITIONS

ACCESS TO HOUSING

POTABLE WATER

ACCESS TO MEDICAL CARE

WORKER SAFETY & TRAINING

WATER RESOURCES

BUFFER ZONES

NURSERY WITH NATIVE SPECIES

AGROCHEMICAL BUFFER

FERTILIZER USE MINIMIZED

KPI Chart Legend
### CONSERVING BIODIVERSITY

<table>
<thead>
<tr>
<th>Category</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
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<tbody>
<tr>
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<td>CG-CB 1.1</td>
<td>CG-CB 3.1</td>
<td>CG-CB 3.10</td>
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<tr>
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<td>Conservation Set Aside</td>
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### SOIL RESOURCES

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<th>FY10</th>
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<tbody>
<tr>
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<td>CG-SR 1.2</td>
<td>CG-SR 1.6</td>
<td>CG-SR 2.3</td>
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<td>Protecting Slopes</td>
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<td>Organic Matter Layer</td>
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<td>Soil Analysis</td>
<td>CG-SR 2.8</td>
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<td>Foliar Analysis</td>
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### ENVIRONMENTAL MANAGEMENT

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<tr>
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<tr>
<td>Implementing Management Plan</td>
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Coffee Processing KPIs

<table>
<thead>
<tr>
<th>HIRING PRACTICES</th>
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<td><strong>HAZARDOUS ACTIVITIES</strong></td>
<td><strong>ENERGY CONSERVATION/IMPACTS</strong></td>
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<td>SR-HP 3.1</td>
<td>SR-HP 3.3</td>
<td>SR-WC 3.6</td>
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<td>SR-HP 3.4</td>
<td>SR-HP 3.5</td>
<td>CP-EC 2.4</td>
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<table>
<thead>
<tr>
<th>WATER CONSERVATION</th>
<th>WASTE MANAGEMENT</th>
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<th>SOIL RESOURCES</th>
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<tr>
<td><strong>REDUCING WASTEWATER IMPACTS</strong></td>
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<td><strong>MAINTAINING SOIL PRODUCTIVITY</strong></td>
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<td>CP-WM 1.1</td>
<td>PS-EM 2.1</td>
<td>PS-EM 2.1</td>
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<td>FY08 FY09 FY10</td>
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<td>FY08 FY09 FY10</td>
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Producer Support Organizations KPIs

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<th>ORGANIZATION MANAGEMENT</th>
<th>CONSERVING BIODIVERSITY</th>
<th>ENVIRONMENTAL MANAGEMENT</th>
<th>SOIL RESOURCES</th>
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</thead>
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<td><strong>MAINTAINING A COFFEE SHADE CANOPY</strong></td>
<td><strong>MONITORING PLAN</strong></td>
<td><strong>MAINTAINING SOIL PRODUCTIVITY</strong></td>
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<td>PS-CB 2.1</td>
<td>PS-EM 2.1</td>
<td>PS-EM 2.1</td>
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<td>FY08 FY09 FY10</td>
<td>FY08 FY09 FY10</td>
<td>FY08 FY09 FY10</td>
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</table>
Indonesia introduced applications to the program in all three years analyzed. Across all years, the applications were made up entirely of small farms. The proportion of farms receiving a preferred status increased from FY08 to FY10, and those receiving non-compliant status declined from several in FY08 to none in either FY09 or FY10.

### Key Performance Indicators

#### FARM DISCUSSION

**Environmental Responsibility:**
Among the KPIs applicable to small farms, Indonesia’s farms performed well against most with high global averages, but with a few exceptions. For instance, farms performed below the global average across all three years against the KPI related to Water Body Protection (CG-WR1.2). While farms performed above the global average against the KPI related to Maintaining a Shade Canopy (CG-CB1.1) in FY08 and FY10, no farms verified for FY09 complied. Performance against Soil Resources KPIs (CG-SR1.6 and CG-SR2.3) varied across the analysis years, with some cases of performance above the global average and some below.

**Social Responsibility:**
Farms in Indonesia performed above the global average against most applicable KPIs in the Social Responsibility section. One exception is against the Hours of Work KPI (SR-HP3.4), where performance was below the global average in FY09, but above in FY10. Although performance was above the global average in all three years against the KPI related to Wages and Benefits (SR-HP1.13), it declined across the analysis period.

#### MILL DISCUSSION

Stand-alone and on-premises mills performed well above the global average against all Water Conservation and Waste Management KPIs (CP-WC2.1 and CP-WM1.1-1.3). However, they failed against the Energy Conservation KPI (CP-EC2.4), with a 0% rate of compliance across all three years. They were below the global average against two of the KPIs related to Hours of Work (SR-HP3.1 and 3.3), but above against the third (SR-HP3.4). They also performed below the global average against the Access to Medical Care KPI (SR-WC3.6) in FY08 and FY09, but above the global average in FY10.

#### PRODUCER SUPPORT ORGANIZATIONS DISCUSSION

PSOs performed below the global average against most of the KPIs, with the exception of one Management and Tracking Systems KPI (PS-MT1.2), where they performed well across all three years. PSOs in FY09 failed against all environment-related KPIs, and while performance was better in both FY08 and FY10, it was still below the global average and, in many cases, well below.
OTHER FINDINGS

Farms performed well against many indicators related to Hours of Work, with many scores among the top 10%, with the exception of indicators related to overtime pay (SR-HP1.9) and pay for part-time workers (SR-HP1.12), where performance was among the bottom 10% globally. Farms performed well against the indicator set related to Child Labor, Forced Labor and Non-Discrimination (SR-HP4). Farms also performed among the lowest 10% against indicators related to physical control of pest and disease infestations (CG-EM1.6).

CONCLUSIONS

The reduction of non-compliant applications and zero-tolerance failures by FY10 is a positive development in Indonesia, as is the increase in applications receiving a preferred status. However, there remain several areas where farm, mill and PSO performance is below the global average. PSO performance, in particular, lags that of other countries and may be an important area of focus for Starbucks, as improving the ability of PSOs to support the farms in their networks may, in turn, improve the scores of farms overall.

Coffee Growing KPIs
CONSERVING BIODIVERSITY

MAINTAINING A COFFEE SHADE CANOPY
NO FOREST CONVERSION
CONSERVATION SET ASIDE

CG-CB 1.1
CG-CB 3.1
CG-CB 3.10

Fy08 FY09 FY10 FY08 FY09 FY10 FY08 FY09 FY10

SOIL RESOURCES

SOIL MANAGEMENT PLAN
PROTECTING SLOPES
ORGANIC MATTER LAYER
SOIL ANALYSIS
FOLIAR ANALYSIS

CG-SR 1.2
CG-SR 1.6
CG-SR 2.3
CG-SR 2.8
CG-SR 2.9

Fy08 FY09 FY10 FY08 FY09 FY10 FY08 FY09 FY10

ENVIRONMENTAL MANAGEMENT

WHO CHEMICALS
REGULAR MONITORING
MONITORING PROGRAM
IMPLEMENTING MANAGEMENT PLAN

CG-EM 1.1
CG-EM 1.5
CG-EM 2.1
CG-EM 2.4

Fy08 FY09 FY10 FY08 FY09 FY10 FY08 FY09 FY10
Coffee Processing KPIs

**HIRING PRACTICES**

- **Regular Hours**
  - SR-HP 3.1

- **Total Hours**
  - SR-HP 3.3

- **Hazardous Activities**
  - SR-HP 3.4

**WORKING CONDITIONS**

- **Access to Medical Care**
  - SR-WC 3.6

**ENERGY CONSERVATION**

- **Energy Conservation/Impacts**
  - CP-EC 2.4

**WATER CONSERVATION**

- **Reducing Wastewater Impacts**
  - CP-WC 2.1

**WASTE MANAGEMENT**

- **No Contamination**
  - CP-WM 1.1

- **Composting**
  - CP-WM 1.2

- **Soil Amendment**
  - CP-WM 1.3

**Producer Support Organizations KPIs**

**Organization Management**

- **Participant List**
  - PS-MT 1.2

- **Provides Receipt**
  - PS-MT 1.3

**Conserving Biodiversity**

- **Maintaining a Coffee Shade Canopy**
  - PS-CB 1.2

- **Protecting Wildlife**
  - PS-CB 2.1

**Environmental Management**

- **Monitoring Plan**
  - PS-EM 2.1

- **Annual Meetings**
  - PS-EM 2.4

- **Management Plan**
  - PS-EM 2.5

- **Training Materials**
  - PS-EM 2.10

- **Maintaining Soil Productivity**
  - PS-SR 2.4
Applications from Kenya participating in the program present a varied picture over the analysis period. Applications entered the program in all three years, but varied greatly in the farm size of the farm population. This varied set of participants included many non-compliant applications in FY09, a large proportion of preferred status in FY08, and verified status in FY10.

**Key Performance Indicators**

**FARM DISCUSSION**

*Environmental Responsibility:* Many KPIs were not applicable to farms in Kenya in FY10, because the applications included only small farms in that year. Otherwise, performance against Environmental Responsibility KPIs was varied. Farms performed particularly well against most Environmental Management KPIs, especially Farm Management and Monitoring KPIs (CG-EM2.1 and 2.4) and one Ecological Pest and Disease Control KPI (CG-EM1.5), where rates of compliance were well above the global average. Farms lagged the global average against most Soil Resources KPIs, including all Soil Productivity KPIs (CG-SR2.3, 2.8 and 2.9) across all three years, and one KPI related to cover crops on mild slopes (CG-SR1.6).

*Social Responsibility:* Farms performed well against the Hours of Work KPI (SR-HP3.4) and the Wages and Benefits KPI (SR-HP1.13) in FY09 and FY10, but all of those included in FY08 applications failed to comply with that KPI. Performance was well below the global average against the Access to Medical Care KPI in both applicable years (FY08 and FY09). Farms also failed to comply with the KPI related to Work Safety and Training in FY10, though they performed well above the global average in FY09.

**MILL DISCUSSION**

Milling in Kenya was performed only at stand-alone mills in all three years. Mills performed well against all Waste Management KPIs (CP-WM1.1-1.3), performing at or above the global average across all three years. Mills in FY10 failed to comply with the Water Conservation KPI, though they performed above the global average in FY08 and FY09. Mills did not perform as well against two of the Hours of Work KPIs (SR-HP3.1 and 3.3), with rates of compliance well below the global average in both FY09 and FY10. Access to Medical Care stands out as a KPI with particularly poor rates of compliance, with rates below 40% across all three years – well below the global average of over 60%.

**PRODUCER SUPPORT ORGANIZATIONS DISCUSSION**

PSOs in Kenya performed at or above the global average against nearly all KPIs in both relevant analysis years (FY09 and FY10). PSOs had particularly strong performance relative to the global average against Environmental Management and Monitoring KPIs (PS-EM2.1, 2.4, 2.5 and 2.10). The only exceptions to this were for one of the Protecting Wildlife KPIs and the Soil Resources KPI in FY09.
OTHER FINDINGS

Farms in Kenya performed well against indicators related to Freedom of Association in FY09, with many cases of 100% compliance. Several indicators in the set related to Controlling Surface Erosion (CG-SR1) and Maintaining Soil Productivity (CG-SR2) had very low performance, with several cases of 0% compliance, especially in FY09. There was significant variation in the performance of small versus large farms, but no discernable patterns in which one size would perform better than the other.

CONCLUSIONS

Entities that entered the program from Kenya varied significantly from year to year, presenting a mixed overall picture for the country. PSOs performed particularly well. Farms also performed well against Environmental Management and Conserving Biodiversity KPIs. Farm performance against Soil Resources KPIs may represent an important area of focus, as they lagged the global average in most cases.

Coffee Growing KPIs
CONSERVING BIODIVERSITY
MAINTAINING A COFFEE SHADE CANOPY
NO FOREST CONVERSION
CONSERVATION SET ASIDE

SOIL RESOURCES
SOIL MANAGEMENT PLAN
PROTECTING SLOPES
ORGANIC MATTER LAYER
SOIL ANALYSIS
FOLIAR ANALYSIS

ENVIRONMENTAL MANAGEMENT
WHO CHEMICALS
REGULAR MONITORING
MONITORING PROGRAM
IMPLEMENTING MANAGEMENT PLAN
Coffee Processing KPIs

Hiring Practices

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<th>Regular Hours</th>
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<td>SR-HP 3.4</td>
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<td>FY08</td>
<td>FY09</td>
<td>FY10</td>
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Working Conditions

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<tr>
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<tbody>
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<td>SR-WC 3.6</td>
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<td>FY08</td>
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Energy Conservation

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Water Conservation

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Waste Management

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Producer Support Organizations KPIs

Organization Management

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<tr>
<th>Participant List</th>
<th>Provides Receipt</th>
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Conserving Biodiversity

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<thead>
<tr>
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<tbody>
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Environmental Management

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<th>Management Plan</th>
<th>Training Materials</th>
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<td>FY08 FY09 FY10</td>
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Soil Resources

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<td>PS-SR 2.4</td>
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<tr>
<td>FY08 FY09 FY10</td>
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</table>

C.A.F.E. PRACTICES PROGRAM FY08 - FY10 | 121
Mexico had applications in FY08 and FY10 but no new applications in FY09. In both years, the applications were comprised mostly of small farms, with a small number of medium and large farms as well. In both years, the majority of applications received a verified status. There was an increase in applications achieving a preferred status between FY08 and FY10, and FY10 also marked the first year with applications achieving strategic status across the three years.

**Key Performance Indicators**

**FARM DISCUSSION**

**Environmental Responsibility:**
Performance against Environmental Responsibility KPIs is mixed in Mexico. There are two instances where farms performed well above the global average in both FY08 and FY10 against Soil Resources KPIs related to protection of mild slopes (CG-SR1.6) and minimizing fertilizer use (CG-SR2.3). Yet in the same section, they performed well below the global average against others related to having a soil-management plan (CG-SR1.2), and conducting soil and foliar analyses (CG-SR2.8 and 2.9). Performance was above the global average against Water Quality KPIs (CG-WR2.1 and 2.3), but below the global average in both analysis years against Water Body Protection KPIs (CG-WR1.2 and 1.13). Farms performed at or near the global average for Conserving Biodiversity across all KPIs and both years.

**Social Responsibility:**
In many cases, performance was at or above the global average for the Social Responsibility KPIs in both years. Notable exceptions are against the Hours of Work KPI (SR-HP3.4) and the Worker Safety and Training KPI (SR-WC4.7), where performance was well below the global average in FY10. Farms performed above the global average against the Wages and Benefits KPI (SR-HP1.13) and the Access to Medical Care KPI (SR-WC3.6) in both years.

**MILL DISCUSSION**
Stand-alone mills performed above the global average against Hours of Work KPIs (SR-HP3.1, 3.3, and 3.4) in FY08, and below the global average in FY10 – but well above the global average against the Access to Medical Care KPI (SR-WC3.6) in both years. Both stand-alone and on-premises mills performed below the global average against Water Conservation KPIs (CP-WC2.1) and all Waste Management KPIs (CP-WM1.1-1.3) in both years. On-premises mills had particularly low levels of compliance against the KPI related to the use of processing by-products (CP-WM1.3) in FY08, but the rate of compliance increased significantly in FY10.

**PRODUCER SUPPORT ORGANIZATIONS**
PSOs performed at or above the global average against all Organizational Management (PS-MT1.2 and 1.3) and Environmental Management (PS-EM2.1, 2.4, 2.5, and 2.10) KPIs in both years. They performed less well against the Conserving Biodiversity KPIs (PS-CB1.2 and PS-CB2.1) and against the Maintaining Soil Productivity KPI (PS-SR2.4), with a rate of compliance of 0% against that KPI in FY10.
OTHER FINDINGS
Mexican farms performed particularly well against indicators related to Hours of Work (SR-HP1) and Collective Bargaining (SR-HP2), with many instances in the top 10% globally. Exceptions included indicators related to a workers’ fund (SR-HP2.7 and 2.8), where performance was among the bottom 10%. Performance was also low against two Economic Accountability indicators (EA-IS1.4 and 1.5) and against several indicators related to marking of boundaries on water bodies (CG-WR1.8-1.11). There was variation among farm sizes, but irregularly, with some cases of consistent performance and some of wide variation.

CONCLUSIONS
Farms and PSOs in Mexico tended to perform well against most Environmental Management KPIs. While performance was good against some Soil Resources KPIs, it was very low against others, both on farms and within PSOs, indicating an important area for focusing improvements. Waste Management on both stand-alone and on-premises mills was also an area where Mexico lagged the rest of the participating countries and may be an opportunity area for improvement.

Coffee Growing KPIs

**Hiring Practices**

**Wages and Benefits**

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**Hours of Work**

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**Working Conditions**

**Access to Housing**

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**Potable Water**

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**Access to Medical Care**

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**Worker Safety & Training**

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**Water Resources**

**Buffer Zones**

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**Nursery with Native Species**

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**Agrochemical Buffer**

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**Fertilizer Use Minimized**

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Coffee Processing KPIs

HIRING PRACTICES
- REGULAR HOURS
- TOTAL HOURS
- HAZARDOUS ACTIVITIES
- WORKING CONDITIONS
  - ACCESS TO MEDICAL CARE
- ENERGY CONSERVATION
  - ENERGY CONSERVATION/IMPACTS

WATER CONSERVATION
- REDUCING WASTEWATER IMPACTS

WASTE MANAGEMENT
- NO CONTAMINATION
- COMPOSTING
- SOIL AMENDMENT

Producer Support Organizations KPIs

ORGANIZATION MANAGEMENT
- PARTICIPANT LIST
- PROVIDES RECEIPT

CONSERVING BIODIVERSITY
- MAINTAINING A COFFEE SHADE CANOPY
- PROTECTING WILDLIFE

ENVIRONMENTAL MANAGEMENT
- MONITORING PLAN
- ANNUAL MEETINGS
- MANAGEMENT PLAN
- TRAINING MATERIALS

SOIL RESOURCES
- MAINTAINING SOIL PRODUCTIVITY
Applications from Nicaragua joined the program in all three years analyzed. Applications were dominated by small farms, which represented over 75% of participating farms, with the remaining split between medium and large farms. The only non-compliant status was awarded in FY08. In all three years, applications received a combination of verified, preferred, and strategic statuses, with the greatest number of strategic statuses awarded in FY10.

### Key Performance Indicators

#### FARM DISCUSSION

**Environmental Responsibility:**
In many cases, farms performed close to or above the global average against Environmental Responsibility KPIs. Farms performed above the global average against Conserving Biodiversity KPIs (CG-CB1.1, CG-CB3.1, and 3.10), with one dip in FY09 for having 5% of the farm set aside for conservation (CG-CB3.10). Performance was below the global average in all analysis years against the Water Quality KPIs (CG-WR2.1 and 2.3) and against the KPIs related to soil testing (CG-SR2.8 and 2.9).

**Social Responsibility:**
Farms in Nicaragua lagged behind the global average for many of the Social Responsibility KPIs, particularly in FY10. In none of the years analyzed did the farms meet the global average against the KPIs related to Hours of Work (SR-HP3.4), access to potable water (SR-WC1.2), Access to Medical Care (SR-WC3.6), or Worker Safety and Training (SR-WC4.7).

#### MILL DISCUSSION

Stand-alone mills performed at or near the global average against all of the Hours of Work KPIs (SR-HP3.1, 3.3 and 3.4). In FY10, they also met the global average for the Access to Medical Care KPI (SR-WC3.6), though they lagged behind the global average in both FY08 and FY09. All mills failed to comply against the Energy Conservation KPI (CP-EC2.4). In most cases, on-premises mills outperformed stand-alone mills against Water Conservation and Waste Management KPIs. Stand-alone mills lagged behind the global average against many Water Conservation and Waste Management KPIs, across most analysis years, with the exception of the KPI related to reuse of organic by-products (CP-WM1.3), where they surpassed the global average in FY09 and FY10.

#### PRODUCER SUPPORT ORGANIZATIONS DISCUSSION

PSOs lagged behind the global average against most KPIs in FY08 and FY09, with the exception of the Organizational Management category, where they out-performed the global average. In FY10, PSOs exceeded the global average in all cases except for the Soil Resources KPI (PS-SR2.4), where they lagged behind the global average.

---

**Nicaragua**

**NORTH AND CENTRAL AMERICA**

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**APPLICATIONS WITH ZERO-TOLERANCE INSTANCES**

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</tr>
<tr>
<td>FY10</td>
<td>5</td>
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</table>
OTHER FINDINGS
Farms performed very well against the indicator related to 10% canopy cover, with 100% rates of compliance across all three analysis years. They also performed well against the Criteria Requirements for the criteria set related to Collective Bargaining (SR-HP2.1-2.3). Farms performed in the middle range to quite low for indicators related to Water Body Protection (CG-WR1). There is variation in performance among farm sizes. In many cases, small farms outperformed medium or large farms.

CONCLUSIONS
Entities in Nicaragua tended to fare more poorly against Social Responsibility KPIs than other KPIs and this may represent an area to focus efforts for continued supplier development – particularly as there are several zero-tolerance failures among farms sampled in Nicaragua. There is also room for improvement against some Water Quality and Soil Productivity KPIs.

Coffee Growing KPIs

HIRING PRACTICES

WAGES AND BENEFITS

HOURS OF WORK

KPI Chart Legend

WORKING CONDITIONS

ACCESS TO HOUSING

POTABLE WATER

ACCESS TO MEDICAL CARE

WORKER SAFETY & TRAINING

WATER RESOURCES

BUFFER ZONES

NURSERY WITH NATIVE SPECIES

AGROCHEMICAL BUFFER

FERTILIZER USE MINIMIZED

KPI Chart Legend
CONSERVING BIODIVERSITY
MAINTAINING A COFFEE SHADE CANOPY
NO FOREST CONVERSION
CONSERVATION SET ASIDE

SOIL RESOURCES
SOIL MANAGEMENT PLAN
PROTECTING SLOPES
ORGANIC MATTER LAYER
SOIL ANALYSIS
FOLIAR ANALYSIS

ENVIRONMENTAL MANAGEMENT
WHO CHEMICALS
REGULAR MONITORING
MONITORING PROGRAM
IMPLEMENTING MANAGEMENT PLAN
Coffee Processing KPIs

**Hiring Practices**
- Regular Hours
- Total Hours
- Hazardous Activities
- Access to Medical Care

**Working Conditions**
- Energy Conservation
- Energy Conservation/Impacts

**Waste Management**
- Reducing Wastewater Impacts
- No Contamination
- Composting
- Soil Amendment

**Producer Support Organizations KPIs**

**Organization Management**
- Participant List
- Provides Receipt

**Conserving Biodiversity**
- Maintaining a Coffee Shade Canopy
- Protecting Wildlife

**Environmental Management**
- Monitoring Plan
- Annual Meetings
- Management Plan
- Training Materials

**Soil Resources**
- Maintaining Soil Productivity
Applications joined the program from Panama in both FY08 and FY10. No PSOs were evaluated from Panama during either year.

Key Performance Indicators

**FARM DISCUSSION**

*Environmental Responsibility:* Farms performed well against the Conserving Biodiversity, Water Body Protection and Farm Management and Monitoring KPIs. Other categories had more varied performance. In particular, none of the farms assessed in FY08 or FY10 was in compliance with the KPI related to shade trees on mild slopes (CG-SR1.6) or the KPI related to foliar analysis (CG-SR2.9). The KPI related to non-use of hazardous pesticides (CG-EM1.1) had near 100% rate of compliance globally, but farms from Panama were not in compliance in FY08 and just one of the two was in compliance in FY10.

*Social Responsibility:* Farms were in universal compliance against all Working Conditions KPIs. However, the farms were not in compliance against the Wages and Benefits KPI (SR-HP1.13) in FY08 and one was not in compliance with the Hours of Work KPI (SR-HP3.4) in FY10.

**MILL DISCUSSION**

Mills in Panama performed extremely well against all KPIs, achieving rates of compliance of 100% against all applicable KPIs.

**OTHER FINDINGS**

The variation in performance persists through the broader dataset, with many cases of very high and very low performance.

**CONCLUSIONS**

There was consistently strong performance against most Social Responsibility KPIs on farms and universally strong performance by mills. In addition, most farms performed well against Environmental Responsibility KPIs. The area where performance lagged was mostly in the Soil Resources section for farms.
Coffee Growing KPIs

**HIRING PRACTICES**

**WAGES AND BENEFITS**

**HOURS OF WORK**

---

**KPI Chart Legend**

- ![Country % compliant](image)
- ![Global % compliant](image)
- ![No data reported](image)

**WORKING CONDITIONS**

**ACCESS TO HOUSING**

**POTABLE WATER**

**ACCESS TO MEDICAL CARE**

**WORKER SAFETY & TRAINING**

---

**WATER RESOURCES**

**BUFFER ZONES**

**NURSERY WITH NATIVE SPECIES**

**AGROCHEMICAL BUFFER**

**FERTILIZER USE MINIMIZED**

---
CONSERVING BIODIVERSITY
MAINTAINING A COFFEE SHADE CANOPY
NO FOREST CONVERSION
CONSERVATION SET ASIDE

CG-CB 1.1
FY08 FY09 FY10
CG-CB 3.1
FY08 FY09 FY10
CG-CB 3.10
FY08 FY09 FY10

SOIL RESOURCES
SOIL MANAGEMENT PLAN
PROTECTING SLOPES
ORGANIC MATTER LAYER
SOIL ANALYSIS
FOLIAR ANALYSIS

CG-SR 1.2
FY08 FY09 FY10
CG-SR 1.6
FY08 FY09 FY10
CG-SR 2.3
FY08 FY09 FY10
CG-SR 2.8
FY08 FY09 FY10
CG-SR 2.9
FY08 FY09 FY10

ENVIRONMENTAL MANAGEMENT
WHO CHEMICALS
REGULAR MONITORING
MONITORING PROGRAM
IMPLEMENTING MANAGEMENT PLAN

CG-EM 1.1
FY08 FY09 FY10
CG-EM 1.5
FY08 FY09 FY10
CG-EM 2.1
FY08 FY09 FY10
CG-EM 2.4
FY08 FY09 FY10
Coffee Processing KPIs

**HIRING PRACTICES**
- Regular Hours: SR-HP 3.1, SR-HP 3.3, SR-HP 3.4
- Total Hours: SR-HP 3.1, SR-HP 3.3, SR-HP 3.4
- Hazardous Activities: SR-WC 3.6
- Access to Medical Care: CP-EC 2.4

**ENERGY CONSERVATION**
- Energy Conservation: CP-EC 2.4

**WATER CONSERVATION**
- Reducing Wastewater Impacts: CP-WC 2.1

**WASTE MANAGEMENT**
- No Contamination: CP-WM 1.1
- Composting: CP-WM 1.2
- Soil Amendment: CP-WM 1.3

**Producer Support Organizations KPIs**
Producer Support Organizations did not exist in Panama during these analysis years.

**ORGANIZATION MANAGEMENT**
- Participant List: PS-MT 1.2, PS-MT 1.3
- Provides Receipt: PS-CB 1.2, PS-CB 2.1

**CONSERVING BIODIVERSITY**
- Maintaining a Coffee Shade Canopy: PS-CB 2.1
- Protecting Wildlife: PS-CB 2.1

**ENVIRONMENTAL MANAGEMENT**
- Monitoring Plan: PS-EM 2.1, PS-EM 2.4, PS-EM 2.5
- Annual Meetings: PS-EM 2.10
- Management Plan: PS-SR 2.4
- Training Materials: PS-SR 2.4

**SOIL RESOURCES**
- Maintaining Soil Productivity: Not Applicable
Applications came in from Papua New Guinea in all three years analyzed. In all three years, the composition of applications was similar—with most farms (over 75%) being small farms and the remainder divided between medium and large farms. There were issues of zero-tolerance failures in all three analysis years and, in FY08 and FY10, this led to non-compliant application statuses. Otherwise, most applications received a verified status, with some in FY08 being awarded a strategic status and some in FY10 receiving a preferred status.

Key Performance Indicators

**FARM DISCUSSION**

*Environmental Responsibility:*

Farms in Papua New Guinea performed at or near the global average for KPIs in the Conserving Biodiversity section (CG-CB1.1 and CG-CB3.1) and Ecological Pest and Disease Control section (CG-EM1.1 and 1.5). However, performance was weaker against several other KPIs, and the Water Quality KPIs (CG-WR2.1 and 2.3) in particular, where they were below the global average in most cases. Performance was most significantly below the global average for the soil testing KPIs (CG-SR2.8 and 2.9) and the KPI related to conservation set-asides (CG-CB3.10).

*Social Responsibility:*

Farms performed at or near the global average for the KPIs related to Hours of Work (SR-HP3.4) and Access to Housing, Water, and Sanitary Facilities (SR-WC1.1 and 1.2). There were gaps relative to the global average for paying temporary workers more than the minimum wage (SR-HP1.13) in FY08 and FY10. Other gaps occurred for the Access to Medical Care (SR-WC3.6) and Worker Safety and Training (SR-WC4.7) KPIs across all three years.

**MILL DISCUSSION**

Milling in Papua New Guinea occurred only in stand-alone mills during the three-year period. Mills performed at, near, or above the global average against most KPIs in each of the years analyzed. The exception is the Water Conservation KPI (CP-WC2.1), where performance failed to meet the global average during any of the years analyzed.

**PRODUCER SUPPORT ORGANIZATIONS DISCUSSION**

Performance of PSOs against the KPIs varied. PSOs failed to meet the global average rate of compliance against the Protecting Wildlife KPI (PS-CB2.1) during any of the three years. In other areas, there was a mixture of higher-than-average and lower-than-average performance over the period analyzed. Although in FY08, PSOs performed very strongly and above the global average for the Maintaining Soil Productivity KPI (PS-SR2.4), they failed to comply with the same KPI in FY09 and FY10.
OTHER FINDINGS
Farms performed at 100% across all years for a few important indicators, including the indicator related to non-use of invasive species in shade canopy (CG-CB1.7) and non-use of hazardous pesticides (CG-EM1.1). Farms also performed well against Criteria Requirements in the Collective Bargaining section (SR-HP2). However, there were a number of areas where farms performed well below the global average and ranked among the bottom 10% globally, including for several indicators in the Water Body Protection section (CG-WR1), Protecting Wildlife section (CG-CB2) and the Conservation Areas section (CG-CB3). There is wide variation in performance across farm sizes, without significant patterns.

CONCLUSION
The most pressing issue in Papua New Guinea is the occurrence of zero-tolerance failures, which have occurred in each of the three years – one of the only countries in the analysis set where this is the case. Focus on elimination of zero-tolerance failures is a key opportunity area.

Coffee Growing KPIs

HIRING PRACTICES
WAGES AND BENEFITS

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KPI Chart Legend

- Country % compliant
- Global % compliant
- No data reported

WORKING CONDITIONS
ACCESS TO HOUSING

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POTABLE WATER

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ACCESS TO MEDICAL CARE

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WORKER SAFETY & TRAINING

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WATER RESOURCES
BUFFER ZONES

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NURSERY WITH NATIVE SPECIES

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AGROCHEMICAL BUFFER

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FERTILIZER USE MINIMIZED

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## CONSERVING BIODIVERSITY

### Maintaining a Coffee Shade Canopy

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### Conservation Set Aside

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## SOIL RESOURCES

### Soil Management Plan

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### Protecting Slopes

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### Soil Analysis

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### Foliar Analysis

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## ENVIRONMENTAL MANAGEMENT

### Who Chemicals

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### Implementing Management Plan

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C.A.F.E. PRACTICES PROGRAM FY08 - FY10 | 136
## Coffee Processing KPIs

### Hiring Practices
- **Regular Hours**
- **Total Hours**
- **Hazardous Activities**
- **Access to Medical Care**

### Working Conditions

### Energy Conservation

### Water Conservation
- **Reducing Wastewater Impacts**

### Waste Management
- **No Contamination**
- **Composting**
- **Soil Amendment**

### Producer Support Organizations KPIs
- **Organization Management**
- **Conserving Biodiversity**

### Environmental Management
- **Monitoring Plan**
- **Annual Meetings**
- **Management Plan**
- **Training Materials**

### Soil Resources
- **Maintaining Soil Productivity**

---

C.A.F.E. PRACTICES PROGRAM FY08 - FY10  |  137
Applications from Peru entered the program in all three years analyzed. In all years, the applications consisted of almost entirely small farms, with some medium and a few large farms as well. In all three years, more than 50% of applications received a status of preferred or strategic. Although there were zero-tolerance failures found in each of the analysis years, this led to non-compliant status in only FY08.

**Key Performance Indicators**

**FARM DISCUSSION**

*Environmental Responsibility:*
Farms in Peru performed near or above the global average against all KPIs in the Water Resources and Conserving Biodiversity sections. One notable exception is a drop in compliance rate against the KPI related to conversion of natural habitat for coffee production (CG-CB3.1) in FY10 and a general trend to have below average performance on this indicator in each of the three years. In FY08 and FY09, rates of compliance were generally above the global average for the Soil Resources KPIs, though compliance rates were below the average in FY10 for the KPI related to cover crops on mild slopes (CG-SR1.6) and those related to Soil Productivity (CG-SR2.3 and 2.8). For the KPI related to foliar analysis (CG-SR2.9), performance did not meet the global average in either year analyzed. Performance against the Environmental Management KPIs was mostly well above the global average with the exception of FY10 performance related to the KPI related to implementation of insect and disease management plans (CG-EM1.5).

*Social Responsibility:*
Performance for the Social Responsibility KPIs is strong across all years analyzed. The notable exception is against the Wages and Benefits KPI related to paying temporary workers above the minimum wage (SR-HP1.13), where performance was below the global average in all three years. There was a particularly notable increase in performance against the Worker Safety and Training KPI (SR-WC4.7) in FY10, while performance was better than the global average in both analysis years.

**MILL DISCUSSION**
Peru’s applications include both stand-alone and on-premises mills. Stand-alone mills performed very well against the Hiring Practices and Working Conditions KPIs across all years analyzed, performing above the global average in all cases. Both stand-alone and on-premises mills performed well against the Water Management and Waste Management KPIs, though there were some declines in FY10. In FY10, stand-alone mills performed just below the global average for the Water Conservation KPI (CP-WC2.1), as well as against the KPI related to safe handling of processing by-products (CP-WM1.1).
PRODUCER SUPPORT ORGANIZATIONS DISCUSSION
PSOs in Peru performed very strongly. They performed above the global average against all KPIs across all three years with few exceptions. The most significant exception was against the Protecting Wildlife KPI (PS-CB2.1), where performance was below the global average in both FY08 and FY10, though above average in FY09.

OTHER FINDINGS
Peru’s strong performance persists throughout the broader dataset, with few instances of low performance. Farms performed particularly well against indicators in the Ecological Pest and Disease Control section (CG-EM1), with several instances of performance in the top 10% globally. They also performed well against indicators in the section related to Hours of Work (SR-HP3), though performance related to Collective Bargaining (SR-HP2) is more mixed. There is variation in performance among farm sizes, but it is not substantial.

CONCLUSIONS
Entities from Peru performed well throughout the three-year period. There were zero-tolerance failures across all three years, and Peru is one of the few countries where this is the case. There was also a lag in performance behind the global average for the Wages and Benefits KPI, indicating that the social side may be worth more focused attention. There is also room for improvement in soil management where there were notable gaps related to the global average, particularly in FY10.
Coffee Growing KPIs

HIRING PRACTICES

WAGES AND BENEFITS

HOURS OF WORK

WORKING CONDITIONS

ACCESS TO HOUSING

POTABLE WATER

ACCESS TO MEDICAL CARE

WORKER SAFETY & TRAINING

WATER RESOURCES

BUFFER ZONES

NURSERY WITH NATIVE SPECIES

AGROCHEMICAL BUFFER

FERTILIZER USE MINIMIZED
Coffee Processing KPIs

### Hiring Practices

- **Regu:ar Hours**: SR-HP 3.1, SR-HP 3.3, SR-HP 3.4
- **Total Hours**: SR-HP 3.1, SR-HP 3.3, SR-HP 3.4
- **Hazardous Activities**: SR-WC 3.6
- **Access to Medical Care**: CP-EC 2.4

### Energy Conservation

- **Energy Conservation/Impacts**: SR-HP 3.1, SR-HP 3.3, SR-HP 3.4
- **CP-EC 2.4**: FY08, FY09, FY10

### Water Conservation

- **Reducing Wastewater Impacts**: CP-WC 2.1
- **CP-WC 2.1**: FY08, FY09, FY10

### Waste Management

- **No Contamination**: CP-WM 1.1
- **Composting**: CP-WM 1.2
- **Soil Amendment**: CP-WM 1.3

### Producer Support Organizations KPIs

#### Organization Management

- **Participant List**: PS-MT 1.2, PS-MT 1.3
- **Provides Receipt**: PS-MT 1.2, PS-MT 1.3
- **Management Plan**: PS-CB 1.2
- **Training Materials**: PS-CB 2.1

#### Conceiving Biodiversity

- **Maintaining a Coffee Shade Canopy**: PS-CB 2.1
- **Protecting Wildlife**: PS-CB 2.1

#### Environmental Management

- **Monitoring Plan**: PS-EM 2.1, PS-EM 2.4, PS-EM 2.5
- **Annual Meetings**: PS-EM 2.10
- **Maintenance Plan**: PS-SR 2.4
- **Training Materials**: PS-SR 2.4
Rwanda

Key Performance Indicators

FARM DISCUSSION

Environmental Responsibility:

Because Rwanda’s applications consist solely of small farms, many KPIs are not applicable. Farms performed generally well against Environmental Responsibility KPIs, with a few exceptions. In FY10, there was a rate of compliance of 0% against the KPI related to cover crops on mild slopes (KPI CG-SR1.6), but performance was stronger in other years. There also appear to be dips in FY10 for the Water Resources KPIs (CG-WR1.2 and CG-WR 2.1) in FY10, though in these cases, the indicators were simply deemed not applicable to any farms in the application in question. This was also the case for one of the Conserving Biodiversity KPIs (CG-CB1.1) in FY09.

Social Responsibility:

In FY08 and FY09, farms performed well below the global average for the KPI related to wages and benefits (SR-HP1.13), but performance rates were well above the global average in FY10. Performance was strong for the Access to Housing, Water, and Sanitation KPIs (SR-WC1.1 and 1.2), where they were deemed applicable. However, farms failed to comply with the KPI related to Worker Safety and Training (SR-WC4.7) for each of the three years.

MILL DISCUSSION

Applications from Rwanda included only stand-alone mills. Mills performed well in each year against the Waste Management KPIs, with a dip in FY09 against the KPI related to management of processing wastes (CP-WM1.1). They also performed at or near the global average for the Water Conservation KPI. Performance was not as strong for offsetting the health costs of workers (SR-WC3.6), with mills performing well below the global average across all years analyzed.

PRODUCER SUPPORT ORGANIZATIONS DISCUSSION

PSOs performed well on the Organizational Management KPIs across the three years. Performance was strong against the other KPIs by the one PSO in FY10, with the only exception being the failure to comply with the Protecting Wildlife KPI on having a list of threatened species in each of the three years analyzed. In FY08 and FY09, PSOs performed well below the global average against all Environmental Management KPIs.
OTHER FINDINGS

Farms performed well on the KPIs in the section related to Ecological Pest and Disease Control (CG-EM1) and several of the indicators related to Hours of Work (SR-HP3). Farms faced challenges in complying with indicators related to Controlling Surface Erosion (CG-SR1), with several cases of performance in the bottom 10% globally. There were also several cases of low performance for indicators related to Maintaining a Shade Canopy, with the exception of the indicator related to knowledge of areas at risk for erosion (CG-CB1.1), where compliance was at 100%.

CONCLUSIONS

Performance in Rwanda was generally strong across all three years, particularly by farms in the Environmental Responsibility section. There is room for improvement, though, for some Social Responsibility KPIs. PSOs did not perform well in FY08 or FY09, although the one PSO analyzed in FY10 performed more strongly. A particularly notable gap in performance relative to the global average was mill performance against the Access to Medical Care KPI.

Coffee Growing KPIs

### HIRING PRACTICES

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### WATER RESOURCES

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### Coffee Processing KPIs

**Hiring Practices**
- Regular Hours
- Total Hours
- Hazardous Activities
- Access to Medical Care

**Energy Conservation**
- Energy Conservation/Impacts

**Water Conservation**
- Reducing Wastewater Impacts

**Waste Management**
- No Contamination
- Composting
- Soil Amendment

**Producer Support Organizations KPIs**

**Organization Management**
- Participant List
- Provides Receipt

**Conserving Biodiversity**
- Maintaining a Coffee Shade Canopy
- Protecting Wildlife

**Environmental Management**
- Monitoring Plan
- Annual Meetings
- Management Plan
- Training Materials

**Soil Resources**
- Maintaining Soil Productivity

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Producers in Tanzania submitted applications in both FY08 and FY09. In addition, two mills were verified for FY10. Applications consist almost entirely of small farms, though there was a very small number of medium and large farms in FY09. There have not been any zero-tolerance failures in Tanzania. In both FY08 and FY09, most applications received a verified status, though some received a strategic status in FY08.

**Key Performance Indicators**

**FARM DISCUSSION**

*Environmental Responsibility:*
Farms performed particularly well on the Environmental Management KPIs, with scores above the global average in both fiscal years. In addition, farms performed near or above the global average for the Conserving Biodiversity KPIs, with the exception of the KPI related to conservation set-asides (CG-CB3.10), where performance in FY09 was below the global average. Performance was weaker against the Soil Productivity KPIs (CG-SR2.3, 2.8 and 2.9), where performance was well below the global average in FY09.

*Social Responsibility:*
Farms performed well against most Social Responsibility KPIs, meeting the global average in most cases. Performance against the KPI related to Wages and Benefits was below the global average in FY08, but met it in FY09. Rates of performance against the Access to Medical Care KPI (SR-WC3.6) were 0% in both years, with no farms offsetting the costs of health care for workers.

**MILL DISCUSSION**
All mills in applications from Tanzania were stand-alone mills. Performance against the Water Conservation and Waste Management KPIs was strong against all analysis years, with performance near or above the global average. Performance was weak, however, against the Hours of Work KPIs (SR-HP3.1, 3.3, and 3.4), with rates of compliance well below the global average in most cases. Compliance rates were better against two KPIs of the Hours of Work in FY10. Rates of compliance were also poor against the Access to Medical Care KPI (SR-WC3.6), with rates well below the global average in each of the years analyzed.

**PRODUCER SUPPORT ORGANIZATIONS DISCUSSION**
PSO performance was weak in FY08, with several instances where no PSOs complied with a KPI. PSOs in FY09 fared somewhat better, with rates of compliance higher than the global average for most Environmental Management KPIs (with the exception of PS-EM2.1). There were failures in both years for the Protecting Wildlife KPI (PS-CB2.1) and the Soil Resources KPI (PS-SR2.4), with rates of compliance of 0% in both years.
OTHER FINDINGS
Farms performed well for most of the indicators related to Water Body Protection (CG-WR1) and several indicators in the Social Responsibility section, including those in the section related to Collective Bargaining (SR-HP2); Child Labor, Forced Labor, and Non-Discrimination (SR-HP4), and Access to Housing, Water, and Sanitary Facilities (SR-WC1). Farms performed less well against indicators related to Maintaining a Shade Canopy (CG-CB1) and Protecting Wildlife (CG-CB2), with several cases of performance among the bottom 10%.

CONCLUSIONS
PSOs performed well on the Organizational Management KPIs across the three years. Performance was strong against the other KPIs by the one PSO in FY10, with the only exception being the failure to comply with the Protecting Wildlife KPI on having a list of threatened species in each of the three years analyzed. In FY08 and FY09, PSOs performed well below the global average against all Environmental Management KPIs.

Coffee Growing KPIs
Coffee Processing KPIs

Hiring Practices
- **SR-HP 3.1**
- **SR-HP 3.3**
- **SR-HP 3.4**

Working Conditions
- **Regular Hours**
- **Total Hours**
- **Hazardous Activities**
- **Access to Medical Care**

Energy Conservation
- **SR-WC 3.6**
- **CP-EC 2.4**

Water Conservation
- **Reducing Wastewater Impacts**

Waste Management
- **No Contamination**
- **Composting**
- **Soil Amendment**

Producer Support Organizations KPIs

Organization Management
- **Participant List**
- **Provides Receipt**

Conserving Biodiversity
- **Maintaining a Coffee Shade Canopy**
- **Protecting Wildlife**

Environmental Management
- **Monitoring Plan**
- **Annual Meetings**
- **Management Plan**
- **Training Materials**

Soil Resources
- **Maintaining Soil Productivity**

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Key Performance Indicators

FARM DISCUSSION

Environmental Responsibility:
The FY08 farms performed well against nearly all KPIs, with the exception of the KPI related to non-use of hazardous pesticides (CG-EM1.1), where each failed, and the KPI related to conservation set-asides (CG-CB3.10), where one farm failed. In FY10, however, the farm failed against KPIs related to Soil Resources (CG-SR1.16 and CG-SR2.3) and Environmental Management (CG-EM1.5 and CG-EM2.4).

Social Responsibility:
In both years, the farms failed to comply with the Hiring Practices KPIs (SR-HP1.13 and SR-HP3.4) as well as the KPI related to Access to Medical Care (SR-WC3.6). In addition, a farm in FY10 failed against the KPI related to habitable dwellings (SR-WC1.1).

MILL DISCUSSION

All mills verified were stand-alone mills. Mills had failures against KPIs related to hazardous work (CP-HP3.4) and Access to Medical Care (SR-WC3.6), with 0% compliance in both years. There were also some gaps against the Waste Management KPIs, one in FY08 against the KPI related to composting (CP-WM1.2) and one in FY10 against the KPI related to reuse of organic by-products (CP-WM1.3).

CONCLUSIONS

Zero-tolerance incidents were found in Zambia in FY10, leading to non-compliant status, and Zambia’s applications had weaker performance against other social KPIs, indicating that focus on Social Responsibility may be key in Zambia.
Coffee Growing KPIs

**Hiring Practices**

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**Wages and Benefits**

**Hours of Work**

**Working Conditions**

- **Access to Housing**
  - SR-WC 1.1
  - SR-WC 1.2
  - SR-WC 3.6-WR2.1

- **Potable Water**
  - SR-WC 1.1
  - SR-WC 1.2
  - SR-WC 3.6-WR2.1

- **Access to Medical Care**
  - SR-WC 4.7

- **Worker Safety & Training**
  - SR-WC 1.1
  - SR-WC 1.2
  - SR-WC 3.6-WR2.1

**Water Resources**

- **Buffer Zones**
  - CG-WR 1.2
  - CG-WR 1.3

- **Nursery with Native Species**
  - CG-WR 1.3

- **Agrochemical Buffer**
  - CG-WR 2.1

- **Fertilizer Use Minimized**
  - CG-WR 2.3

**KPI Chart Legend**

- Country % compliant
- Global % compliant
- No data reported

Analysis Fiscal Year
Coffee Processing KPIs

**HIRING PRACTICES**
- **REGULAR HOURS**
- **TOTAL HOURS**
- **HAZARDOUS ACTIVITIES**
- **ACCESS TO MEDICAL CARE**
- **ENERGY CONSERVATION**

**WATER CONSERVATION**
- **REDUCING WASTEWATER IMPACTS**

**WASTE MANAGEMENT**
- **NO CONTAMINATION**
- **COMPOSTING**
- **SOIL AMENDMENT**

**PRODUCER SUPPORT ORGANIZATIONS KPIs**
Producer Support Organizations did not exist in Zambia during these analysis years.

**ORGANIZATION MANAGEMENT**
- **PARTICIPANT LIST**
- **PROVIDES RECEIPT**

**CONSERVING BIODIVERSITY**
- **MAINTAINING A COFFEE SHADE CANOPY**
- **PROTECTING WILDLIFE**

**ENVIRONMENTAL MANAGEMENT**
- **MONITORING PLAN**
- **ANNUAL MEETINGS**
- **MANAGEMENT PLAN**
- **TRAINING MATERIALS**

**SOIL RESOURCES**
- **MAINTAINING SOIL PRODUCTIVITY**

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Appendix 1: Glossary of Terms


Available online: http://www.scscertified.com/retail/docs/CAFE_GUI_EvaluationGuidelines_V2.0_093009.pdf

Aggregate Score: The total (summed) score associated with a supplier’s scoring profile. Each scoring profile is associated with a unique, defined Supply Network(s). The maximum possible aggregate score is 100 points. A supplier may apply for and receive a scoring profile and aggregate score for more than one unique, defined Supply Chain.

Agrochemicals: Synthetic substances used to control competition from other organisms (e.g. pesticides and herbicides), and to provide crops with the nutrients necessary to compensate for lack of soil fertility (fertilizers).

Applicant/Application: An entity that seeks status under C. A. F. E. Practices. Individual Estates (those operations that feature both growing and processing of coffee in a single entity) and producer associations (operations which feature either pooled resources amongst many producers or a single processing entity collecting coffee from surrounding small farms) may apply directly to C. A. F. E. Practices. Farms which are not part of a vertically integrated operation may not apply directly to C. A. F. E. Practices but can be represented as part of a producer association.

Areas of high ecological value: Areas that possess one or more of the following attributes:

- Contain globally, regionally or nationally significant concentrations of biodiversity;
- Are in or contain rare, threatened or endangered ecosystems;
- Provide basic services of nature (e.g. watershed protection or erosion control) in critical situations;
- Are fundamental to meeting the basic needs of local communities (e.g. subsistence or health);
- Are critical to local communities’ traditional cultural identity (areas of significance identified in cooperation with such local communities).

Biological Diversity: The variability among living organisms from all sources including, interalia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems.

Buffer Zones: In protecting critical ecological areas, the buffer is an area of land (typically comprised of native vegetation) that reduces the impacts of adjacent activities on the critical area.

Canopy Cover: The multiple stories of foliage in a stand of trees or shrubs, in particular the uppermost continuous layer of branches and foliage.

Chemical Pesticides: The range of herbicides, insecticides, fungicides, rodenticides, nematicides and hormones that are used in coffee growing.

Cherry: The fruit of the coffee tree, which contains the coffee bean(s).

Coffee Supply Chain: The steps and links in the production of green coffee that connect coffee producers to processors to suppliers.

Coffee Supply Network: Another term for Coffee Supply Chain that underscores the fact that the supply chain associated with any single supplier commonly includes several processors and numerous producers.
Conservation Emphasis Areas: Defined areas of the farm where conservation of ecological resources is the primary objective. Coffee harvesting is permitted in a conservation emphasis area as long as it does not interfere with conservation goals. In other words coffee can continue to be cultivated as long as the ecological value that is the focus of the conservation emphasis area is maintained.

Criterion: Specific quality, transparency, environmental or social requirements that form the third hierarchical layer of the C. A. F. E. Practices Generic Evaluation Guidelines.

Crop Cultivation: To till, fertilize, prune, apply herbicide, or undertake other ground disturbing activities related to growing coffee. The practice of simply picking coffee cherries is not considered cultivation.

Ecological Restoration: A process of returning ecosystems or habitats to their native structure and species composition.

Ecosystem: A community of plants, animals, and their physical environments, functioning together as an interdependent unit.

Ecosystem Functions: The interactions between organisms and the physical environment, such as nutrient cycling, soil development, water budgeting, and flammability. The collective intraspecific and interspecific interactions of the biota, such as primary and secondary production and mutualistic relationships.

Endangered Species: Any species which is in danger of extinction throughout all or a significant portion of its range.

Estate: An entity that combines both production and processing of coffee cherry.

Farmer Support Center (FSC): See SCAC.


Field Audit: The process of checking the veracity of C. A. F. E. Practice verification reports by conducting inspections at the farm, processor and/or supplier level.

IUCN Red List: A system designed to determine the relative risk of extinction, and to catalogue and highlight those taxa that are facing a higher risk of global extinction (i.e. those listed as Critically Endangered, Endangered and Vulnerable). Available at http://www.redlist.org/.

Native Biodiversity: The number and variety of naturally occurring organisms found within a specified geographic region.

Long-term: The time-scale manifested by the objectives of the management plan and the commitment to maintain a viable ecological system. The length of time will vary according to ecological conditions, and will be a function of how long it takes a given ecosystem to recover its natural structure and composition following disturbance.

Native Species: A species that occurs naturally in the region.

Natural: Areas where many of the principal characteristics and key elements of native ecosystems such as complexity, structure and diversity are present.

Producer (Farmer): Farming enterprises that cultivate and grow coffee plants for the purpose of harvesting coffee cherries that are subsequently refined into green coffee sold to Starbucks.

Pre-requisite Criteria: The unscored criteria (performance requirements) as found in the C. A. F. E. Practices Generic Evaluation Guidelines that must be met in order to participate in C. A. F. E. Practices.

Principle: The middle or second hierarchical level of the C. A. F. E. Practices Generic Evaluation Guidelines that provide elaboration or the Subject Areas. Principles are further elaborated by Criteria.

Processor: A mill that produces green coffee or parchment from parchment or coffee cherry, using wet or dry processes. No coffee can be sold though C. A. F. E. Practices if there is not a clear chain-of-custody with program participants. Processors cannot be “Suppliers” independent of actual producers.
Producer Support Organization (PSO): An entity that provides support to smallholders in a coffee network. The supplier, mill, coop or other association may serve this function.

Program Applicant: A supplier, processor or grower that has applied to C. A. F. E. Practices, received an Applicant ID number and is in the process of receiving a C. A. F. E. Practices scoring profile assigned by an Approved Verifier.

Program Participant: A supplier, processor or producer that has received a C. A. F. E. Practices scoring profile (as well as meeting the minimum performance for SR-HP1 and SR-HP4) assigned by an Approved Verifier.

Organic: An integrated system of farming based on ecological principles, that replenishes and maintains long-term soil fertility by optimizing conditions for biological activity within the soil, rather than through the application of agrochemicals.

Renewable Sources of Energy: Any resource that provides energy and is capable of indefinite renewal on a human-based time scale.

Starbucks Coffee Agronomy Company (SCAC): Also known as the Farmer Support Center (FSC). SCAC administers C. A. F. E. Practices, including processing supplier applications and verification reports. SCAC also provides technical support and training that promotes high quality coffee for the future.

Score: The numerical index demonstrating the degree of conformance to any of the scored criteria found within the C. A. F. E. Practices Generic Evaluation Guidelines.

SCTC: Starbucks Coffee Trading Company. Operating out of Lausanne, Switzerland, SCTC is responsible for purchasing coffee and ensuring quality for Starbucks.

Smallholder: Any farm of less than twelve hectares.

Stand-alone Processor: A stand-alone wet/dry entity that exclusively processes coffee.

Subject Area: The highest hierarchical level of the C. A. F. E. Practices Generic Evaluation Guidelines. Subject Areas are further elaborated by Principles which, in turn, are further elaborated by criteria.

Supplier: Entities that enter direct contractual supply agreements with Starbucks Coffee Trading Company to sell green coffee.

Supply Chain: The characterization of how the coffee moves from farm to processor to supplier.

Supply Networks: Groups of coffee producers and processors that provide coffee in various stages to suppliers.

Threatened species: Any species that is endangered or is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Verification: The process of ascertaining the extent of conformance to the C. A. F. E. Practices Generic Evaluation Guidelines, as measured through a scoring process conducted by an Approved Verifier.

Verifier: A third party inspector who assesses coffee supply chains against the C. A. F. E. Practices Evaluation Guidelines, evaluating environmental and social performance of producers and processors as well as collecting system of payments information from producers, processors and suppliers.

Vertical Integration: More than one step in the coffee growing, harvesting, processing and trading process being carried out by a single entity.

Worker Day: A unit of time used for weighting social responsibility performance in an aggregate score. A worker day is the generally the unit of time for one day of work for a full-time employee (generally 8 hours).

Workers: Full-time, part-time and temporary/seasonal personnel working in coffee growing and processing operations. Full-time workers are those who are employed on an ongoing basis for the full work day by the entity being verified. Part-time workers are those who are employed either on an ongoing basis for a set number of hours that is less than full-time or are hired on an occasional basis for specific tasks. Temporary/Seasonal workers are those who are hired to work on a during the harvest, both full and part-time.

APPENDIX 1: Glossary of Terms
Appendix 2:  Global Farm Compliance Rates for C.A.F.E. Practices Indicators

Appendix 3:  Global Mill Compliance Rates for C.A.F.E. Practices Indicators

Appendix 4:  Global Producer Support Organization Compliance Rates for C.A.F.E. Practices Indicators