RAINFOREST ALLIANCE

JUNE 2024

Rainforest Alliance and Nestlé Cocoa Plan

Monitoring and Evaluation Highlights 2017-2023

The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect nature and improve the lives of farmers and forest communities.

CONTENTS

INTRODUCTION

THE NESTLÉ COCOA PLAN

Nestlé is committed to building a more responsible cocoa supply chain, working with farmers, communities, and local and international organizations to develop and implement solutions to the challenges facing cocoa-farming communities. Since 2009, the Nestlé Cocoa Plan has positively impacted cocoa-farming families across its three pillars–Better Farming, Better Lives, Better Cocoa–as they aim to source 100 percent of their cocoa through the Nestlé Cocoa Plan by 2025*.

In January 2022, the innovative Nestlé income accelerator program was launched, engaging more than 30,000 cocoa-farming families since 2024.

RAINFOREST ALLIANCE AND NESTLÉ PARTNERSHIP

The Rainforest Alliance and Nestlé have partnered to promote sustainability in Nestlé's cocoa supply chain and in the cocoa sector more broadly. This partnership works on two key interventions:

1. **Certification**: Many of the farmers participating in the Nestlé Cocoa Plan are also certified by the Rainforest Alliance.
2. **Monitoring and Evaluation:** To track the progress of its Nestlé Cocoa Plan and to improve its interventions, Nestlé has partnered with the Rainforest Alliance since 2016 to monitor and evaluate the Nestlé Cocoa Plan's outcomes.

Additionally, the Rainforest Alliance collaborates with Nestlé to drive sustainable impact beyond their supply chain—for example, collaborating as part of the RESTORE project to create resilient ecosystems and transform rural cocoa economies in Côte d'Ivoire.[1]

The objective of this report is to provide an executive summary of the data that has been collected as part of the Rainforest Alliance and Nestlé Cocoa Plan monitoring and evaluation partnership between 2017 and 2023.

DATA AND DATA COLLECTION

As part of this project, the Rainforest Alliance has visited over 8,000 cocoa-farming families in five of the 10 countries where the Nestlé Cocoa Plan is active. The Rainforest Alliance collects data through on-farm observations and interviews with farmers from a representative sample of Nestlé Cocoa Farmers for each country.[2] The data the Rainforest Alliance collects as part of this project does not inform any decisions regarding the certification of a Rainforest Alliance Certificate Holder. The project started in 2017 in Côte d'Ivoire, and expanded to Ghana in 2021. The Rainforest Alliance collects data on general farm characteristics (household size, farm size, yield), Good Agriculture Practices (which include pruning, weeding, pest and disease management, shade management, regenerative agriculture practices that improve soil health, reduce fertilizer use, increase biodiversity and manage water) and data related to farmer income (costs and revenue streams). In the past two years, Nestlé and the Rainforest Alliance have expanded their monitoring and evaluation partnership to three countries in Latin America: Brazil, Ecuador and Mexico. Data collection on pruning, weeding, pest and disease management, harvesting management and shade management practices are also included.

FIGURE 1

Overview of countries and farmers interviewed.

Country	Data collection timeline 2017	2018	2019	2020	2021	2022	2023	Total years of data collection	Farmers interviewed
Cote d'Ivoire								7	6,892
Ghana								3	656
Brazil								2	232
Mexico								2	239
Ecuador								2	239

** This percentage includes volumes of Rainforest Alliance certified and Nestlé Cocoa Plan verified mass balance cocoa.*

SUMMARY OF KEY INSIGHTS IN THIS REPORT

In this report we discuss our observations on three key topics**:**

1. **General farm characteristics:** farm characteristics related to productivity levels and farming family characteristics vary from country to country. Noticeably, farms with more young cocoa trees (younger than 25 years) showed higher levels of productivity.

2. **Good agricultural practices (GAPs):** In West Africa we observe that farmers in Côte d'Ivoire have been able to increase their adoption of good agricultural practices. Between 2017 and 2023, they were able to increase adoption of these practices from 34 percent to 52 percent of the farmers. In Ghana, where cocoa-farming families face many challenges related to weather events and labor costs, fewer farmers have been able to adopt good agricultural practices.

3. **Regenerative agriculture foundation:** The Nestlé Cocoa Plan provides a foundation from which farmers can transition to regenerative agriculture practices. Many farmers already practice elements of regenerative agriculture with support from the Nestlé Cocoa Plan. Some of these practices include use of soil cover, organic fertilizers, and, for more advanced farmers, implementing agroforestry systems.

4. **Cocoa farmer income:** Earning a living income remains a challenge for cocoa farmers. Key drivers of cocoa farming costs are labor and fertilizer. Cocoa farmers rely on the income from cocoa farming to different degrees, with cocoa-farming families in Côte d'Ivoire and Ghana depending most on cocoa as source of income.

Photo by Nice and Serious

CHAPTER 1: COCOA FARMERS GLOBALLY

Nestlé Cocoa Plan is active in 11 countries globally. As part of its monitoring and evaluation campaign, the Rainforest Alliance visits cocoa-farming families in five of these countries: Côte d'Ivoire, Ghana, Brazil, Ecuador, and Mexico. Family composition and the type of cocoa farms differ between countries.

FARM CHARACTERISTICS

TABLE 1.1

Overview of key farm characteristics in the countries we work in (based on 2023 data).

Country	Avg. farm size (ha)	Avg. yield (kg/ha)	Median yield (kg/ha)	Avg. yield per cocoa tree (kg)	Density (trees/ ha)	Female farmers	Avg. children/ household	Household income from cocoa
Côte d'Ivoire	3.5	594	503	0.31	1,904	9%	4.6	82%
Ghana	2.9	444	433	0.31	1,434	33%	3.6	75%
Brazil	23.2	860	750	0.89	970	23%	1.4	58%
Mexico	1.8	289	267	0.7	685	23%	1.8	24%
Ecuador	4	698	606	0.42	991	17%	1.8	48%

The size of the cocoa farms varies from country to country. Globally, more than 90 percent of the cocoa farmers are smallholder farmers.[3] This is reflected in the average size of farms visited, ranging between 1.8 and 3.5 ha (hectares) per farm on average (see Table 1.1 for key farm characteristics in 2023). These farms are often located in rural areas facing challenges such as limited resources, poor infrastructure, and lack of job opportunities. Brazil, however, is an outlier when it comes to farm size where significantly larger farms were observed, averaging 23.2 ha.

Following the size, the average productivity levels also differ across origins (see table 1.1). Brazil reports the highest yield, with an average of 860 kg/ha, and a median of 750 kg/ha. Farm characteristics can impact that yield, such as cocoa tree density and age. Studies have shown that the optimum density for maximum yield is between 1,000 to 1,100 trees per hectare.[4] We observed significant differences in cocoa tree density between West African and Latin American countries. West Africa exhibits greater density, with more than 1,000 trees per hectare on average (see table 1), with even up to 1,904 trees per hectare in Côte d'Ivoire. In contrast to observations in West Africa, there is a much lower tree density in the monitored Latin American countries, with Mexico reporting 685 trees per hectare.

This translates into varying average yield per cocoa tree in these countries, with Brazil achieving the highest yield at 0.89 kg per tree, followed by Ecuador at 0.70 kg per tree, and Mexico at 0.42 kg per tree. In West Africa, both Côte d'Ivoire and Ghana have an average yield of 0.31 kg per tree.

Finally, cocoa trees are most productive between five and 25 years of age. The average distribution of tree age among the farms visited differs (see table 1.2). Most farmers in Ecuador (83 percent) predominantly cultivate younger cocoa trees. In contrast, Brazil, Ghana, and Côte d'Ivoire display a more balanced distribution, with a significant proportion of farmers (45-49 percent) having a large area of their plots covered by young cocoa trees. Mexico deviates from this trend, with a substantial percentage of Mexican farmers (40 percent) reporting no young cocoa trees, suggesting a prevalence of mature cocoa tree stocks on their plots. This age distribution is reflected in the yield data, with Brazil and Ecuador—which have higher amounts of young cocoa trees—achieving greater than average yields (860 kg/ha and 698 kg/ha, respectively) compared to Côte d'Ivoire, Ghana, and Mexico (594 kg/ha, 444 kg/ha, and 289 kg/ha, respectively).

COCOA FARMING FAMILIES

Besides the key farm characteristics, the cocoa-farming families themselves also differ in terms of characteristics across the countries. A key family characteristic is the number of children reported to be part of a household. Notably, the cocoa farming families in Côte d'Ivoire report the highest number, with on average 4.6 children per household. In comparison, in Latin America countries, the average number of children reported per household varies between 1.4 and 1.8.

In all countries visited, female cocoa farmers are still in the minority. Ghana has the highest percentage of female cocoa farmers (33 percent), followed by Brazil and Mexico (23 percent) and Ecuador (17 percent), with the lowest percentage of female farmers reported in Côte d'Ivoire (9 percent). These numbers most likely underrepresent the role of women in cocoa farming. In both Ghana and Côte d'Ivoire, women often don't inherit land, leading to their underrepresentation as cocoa farmers. Women are, however, often part of all the key steps of production.[5] Supporting female cocoa farmers is seen as an important opportunity for the future of the industry in which an aging cocoa-producing population is a significant challenge.

TABLE 1.2

Cocoa tree stock age.

Country	Avg. Yield (kg/ha)	Plot area coverage (%).				
		0%	1 - 25%	26 - 50%	51 - 75%	76 - 100%
Brazil	860	7%	20%	17%	7%	49%
Côte d'Ivoire	594	10%	17%	18%	10%	45%
Ecuador	698	3%	6%	3%	6%	83%
Ghana	444	11%	21%	15%	7%	47%
Mexico	289	40%	27%	7%	10%	16%

This chart represents the estimated percent of plot area which is planted with cocoa tree stock below 25 years of age.

CHAPTER 2: GOOD AGRICULTURAL PRACTICES

GOOD AGRICULTURE PRACTICES (GAPS)

As part of the Nestlé Cocoa Plan's "better farming" pillar, Nestlé aims to support farmers with training and resources to improve yields and livelihoods. This includes training on Good Agricultural Practices (GAPs), integrated pest management, fertilizer, composting, integrated weed management, and agroforestry. Nestlé focuses on promoting five GAPs through the Nestlé Cocoa Plan: pruning, pest and disease control, weeding, shade management, and harvest management. These five GAPs were developed based on work done with the World Cocoa Foundation's Cocoa Action program. Nestlé has since continued to develop this methodology. The Rainforest Alliance tracks progress on these GAPs through on-farm observations and interviews with the cocoa farmers, and reports on the progress of the adoption of these practices in Côte d'Ivoire and Ghana.

TRAINING

In West Africa, the percentage of farmers who reported to have received training was notably high, with 63 percent of Côte d'Ivoire farmers participating, and 92 percent in Ghana. The key reported topics of these trainings were "Good Agriculture Practices" including Integrated Pest and Weed Management. In Latin America, between 30 and 50 percent of the farmers indicated they had attended a training. This implies there is room to engage more farmers through training in these countries.

West Africa

Côte d'Ivoire

Between 2017 and 2023, the percentage of farmers adopting four GAPs— including pruning — has grown from 34[6] to 52 percent see figure 2.1).[7]Improved GAP adoption ratesare seen in pruning, harvest management practices, shade management, and weeding practices.

FIGURE 2.1

GAPs adoption over time (% of farmers) - Côte d'Ivoire

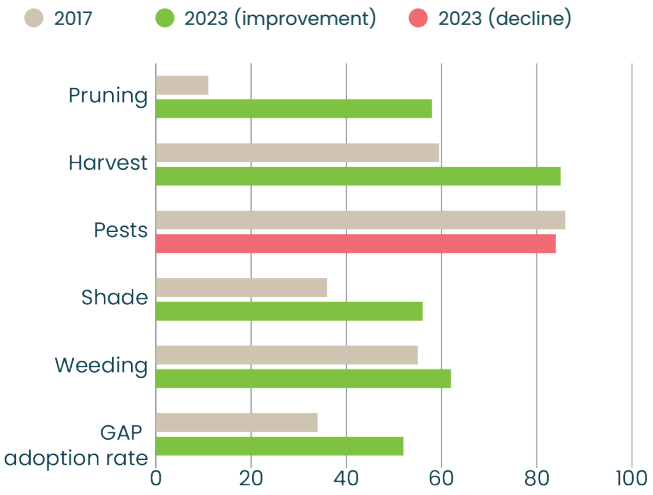


Photo byGiuseppe Cipriani

Pruning is a key intervention incentivized through the Income Accelerator Program, and also applied in some Nestlé Cocoa Plan farms. There has been a significant improvement in adoption of pruning in Côte d'Ivoire, growing from 10 percent to 58 percent between 2017 and 2023. This growth is partially due to the incentives provided by Nestlé as part of the Income Accelerator Program, which allows farmers to hire teams to support pruning activities. Of the farmers who are part of the Income Accelerator Program and receive an incentive to use pruning gangs on their farm, 93 percent of the farmers indicated pruning gangs had pruned the farms, in comparison to 20 percent of the farmers using pruning gangs without incentive. [8] Overall, the quality of pruning techniques in Côte d'Ivoire was evaluated as "good" on 35- 64 percent of the farms visited.

Increased adoption of shade management is another positive trend in GAPs practice by farmers in Côte d'Ivoire. Nestlé supports these farmers by distributing seedlings for shade trees. The World Cocoa Foundation established a shade coverage milestone of between 18 and 20 shade trees per hectare; The number of farmers achieving this milestone in Côte d'Ivoire has increased from 34 percent to 56 percent between 2017 and 2023. On average in 2023, participating farms counted 11 trees that provide shade per hectare, including five different species on average, and 76 percent of the farmers indicated they had planted new shade trees in the past year. This data also reflects the impact of the Income Accelerator program: 82 percent of participating farmers reported to have planted shade trees in 2023, in comparison to 48 - 55 percent of the farmers who do not participate in the Nestlé Income Accelerator Program.[9]

The other practices that showed signs of improved adoption are good harvesting practice and weeding practice. Good harvesting practice increased from 59 percent to 85 percent adoption, indicating that in 2023 there are few forgotten pods or scarring on the tree from the machete used during harvesting. Adoption of good weeding practice also increased from 55 percent to 62 percent.

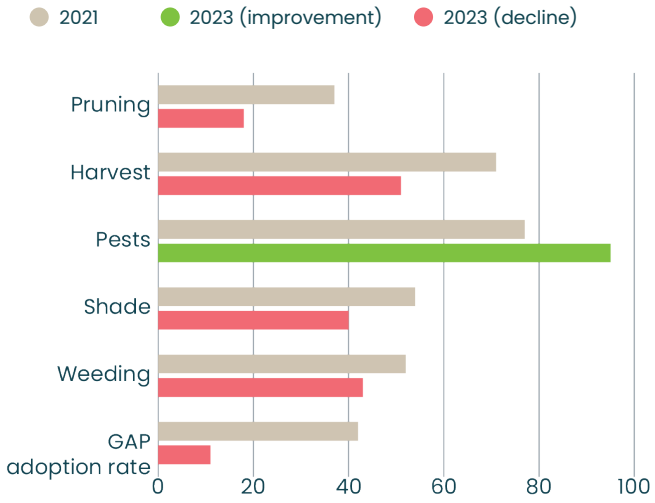
The adoption of pest and disease management slightly decreased between 2017 and 2023. A potential reason for this could be that most farmers were already adopting this practice in 2017. The most frequently identified pests and diseases by farmers in 2023 were stem borer (reported by 65 percent of farmers) and black pod (reported by 52 percent of farmers).

Ghana

Within the three years of data collection on GAP practices by the Rainforest Alliance in Ghana, there has been an increased adoption rate for one good agricultural practice: pest and disease management. For the other four agricultural practices, there has been a decrease or little change on adoption rate (see figure 2.2). There are several external factors that might have hindered Ghanaian cocoa farmers' ability to adopt GAPs. Climate change has been a significant challenge, with irregular rainfall and intense sunshine affecting cocoa production.[10] Unpredictable rains and strong winds have led to cocoa flowers either burning or falling off before they could form pods, significantly reducing yields. Additionally, economic instability— particularly the devaluation of Ghana's currency, and fluctuations in cocoa prices—[11] has limited farmers' ability to invest in essential inputs and practices.[12] Another significant barrier is the high cost of labor in Ghana. Implementing proper GAPs requires hired labor, which is for many farmers. Survey data indicates that labor costs constitute 50 percent of the total cost for cocoa farmers in Ghana. All these factors could hinder the consistent adoption of GAPs among Ghanaian cocoa farmers, even with high training participation rates.

FIGURE 2.2

GAPs adoption over time (% of farmers) - Ghana



An increase from 77 percent to 91 percent of farmers adopting good pest management practices was observed in Ghana between 2021 and 2023. This increase is partially driven by 94 percent of the farmers using pesticides, mostly in combination with an increased level of pests and diseases observed on farms. The two most frequently identified pests and diseases on farms are mirid—reported by 76 percent of the farmers—and black pod—reported by 70 percent .

A decrease of adoption of GAPs relating to pruning, harvesting, shade management, and weeding was observed compared to 2021 data. The percentage of farmers adopting good pruning practices reduced from 37 percent to 17 percent. Overall, in 2023, between 16 percent and 37 percent of farmers were observed to have good quality techniques on various aspects of pruning. In 2023, 48 percent of the farmers indicated they did the pruning themselves, and 44 percent indicated that hired individuals did the pruning. 59 percent of the farmers indicated that less than a quarter of their farm was dedicated to agroforestry.

The adoption of good weeding practices in Ghana dropped from 52 percent to 42 percent of farmers. Overall, 98 percent of farmers indicated they used manual weeding methods.

Latin America

In the past two years, Nestlé and the Rainforest Alliance have expanded their monitoring and evaluation partnership to include three countries in Latin America, collecting data on pruning, weeding, pest and disease management, harvesting management, and shade management.

Pruning practices in Latin America vary, with Brazil and Mexico showing mixed results in terms of quality. In Brazil and Mexico, the pruning quality is inconsistent, achieving good ratings in some aspects, but falling to "medium" or "bad" in others. In contrast, the quality of the pruning in Ecuador was consistently observed as "good". In Brazil, most farms indicate that hired help supported on pruning, in comparison to Mexico, where most farmers indicated they did the pruning themselves.

In general, medium severity of pests and diseases were observed across the monitored countries in Latin America. The most common reported pests and diseases are Monilia (reported by 90 percent of the farmers in Mexico and 70 percent of the farmers in Ecuador) and black pod (reported by 43 percent of the farmers in Ecuador and 47 percent of the farmers in Brazil). In Mexico, the most prevalent pest identified on farms is squirrel (Sciurus Vulgaris) (identified by 92 percent of the farmers).

Overall, high-quality weeding practices were observed in these areas. 68 percent of the farmers in Brazil, 57 percent of the farmers in Ecuador, and 63 percent of the farmers in Mexico were observed to have good weed management.

The level of adoption of shade management practices in Latin America differs significantly. The amount of shade that is optimal for the cocoa farming system differs in each origin.[13,14] Traditionally, in Brazil, part of the farm typically uses the Cabruca farming system, in which cocoa trees are planted under tropical native canopy shade cover. The gathered data indicates that 39 percent of the farmers dedicate 76 – 100 percent of their cocoa farms to agroforestry, with an average of 110 shade trees per hectare and 13 shade tree species per hectare. In comparison, Ecuador is traditionally a full sun-grown cocoa growing system. In Ecuador 25 percent of the land area was observed as dedicated to agroforestry, with an average of eight shade trees per hectare, and four different tree species per hectare. The efforts regarding planting shade trees across Ecuador, Mexico, and Brazil, also differ with 23 percent, 24 percent, and 10 percent of farmers respectively indicating they planted shade trees in 2023.

Finally, harvesting practices are best performed in Ecuador, where 66 percent of the farms were observed to have good harvest management practices, in comparison to Brazil at 44 percent and Mexico 33 percent.

CHAPTER 3: FOUNDATION OF REGENERATIVE AGRICULTURE PRACTICES

INTRODUCTION TO REGENERATIVE AGRICULTURE

Looking forward, regenerative agriculture practices are gaining importance for Nestlé's sustainability strategy. Nestlé aims for sourcing 20 percent of its key ingredients from farmers adopting regenerative agricultural practices by 2025, and 50 percent by 2030.[15]

The transition to regenerative agriculture practices is a journey requiring time and investment from all players within a supply chain. As part of Nestlé's strategy, it has identified practices with expected outcomes related to three key natural resources: biodiversity, water and soil. The Nestlé Cocoa Plan and the Rainforest Alliance certification program provide a foundation on which these regenerative practices can be built upon. Farmers are already starting to adopt regenerative practices. The coming years will require increased investment, support, and monitoring to drive scaling of these practices.

Already discussed above, a key regenerative agriculture practice is agroforestry, which provides increased micro-climate control, helps improve soil water retention, and supports soil structures, which in turn results in decreased vulnerability to erosion and climate change.[16,17]

SOIL HEALTH

Farms and their wider ecosystem are only as healthy as the soils they are built upon. In the cocoa sector, this importance is exhibited in the relationship between diminishing soil fertility and stagnating cocoa yields.[18] There is an urgent need to work with cocoa farmers in helping to rebuild and maintain soil health and soil nutrition; Regenerative practices can support such a transition.

Intercropping, introducing cover crops, and mulching with organic resources are some of the steps farmers can take to improve nutrient cycling and water retention, enhance soil health, and reduce the risk of soil erosion.[19] The use of crop residue and mulch to cover soil was widespread on cocoa farms visited by the monitoring teams. In Mexico and Brazil, over 90 percent of the farmers had near total soil coverage, in contrast to Côte d'Ivoire and Ghana, where 50 percent and 65 percent of the farmers had near total soil coverage, while Ecuador had only 28 percent of farmers with near total soil coverage (see figure 3.1). Over 80 percent of the observed farms in all five countries indicated they use crop residues to cover the soil, and between 36 percent (in Côte d'Ivoire) and 98 percent (in Mexico) use mulch to cover the soil. In general, the use of cover crops was less common in all countries visited (see table 3.2).

FIGURE 3.1

Percentage of farmers covering 76-100% of soil using crop residue and/or mulch

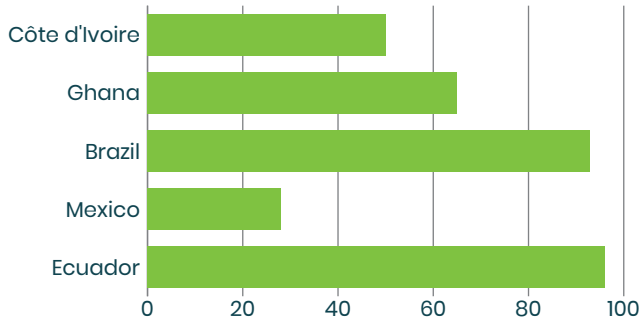


TABLE 3.2

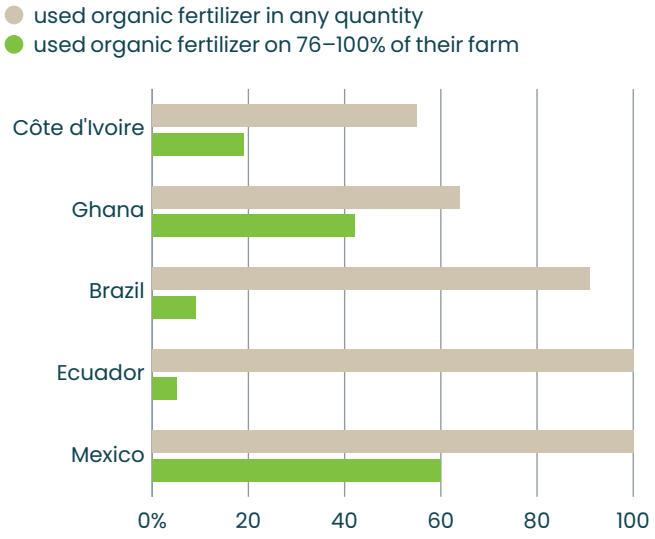
Percentage of farmers using various methods of soil coverage

Country	Mulch	Other crop residue	Cover Crops
Côte d'Ivoire	36%	97%	16%
Ghana	74%	98%	17%
Brazil	83%	80%	0%
Ecuador	70%	94%	0%
Mexico	98%	93%	15%

Besides working with cover crops and soil cover, organic fertilizer can be a means to boost soil nutrients without relying heavily on costly—and often harmful—synthetic inputs. Observed farmers **in all monitored countries are applying organic fertilizer to their farms (see figure 3.3). Overall, between 55 percent and 100 percent of the farmers in the five countries indicated they use organic fertilizer**. They most frequently reported using cocoa pods as a form of organic fertilizer. In Mexico, 100 percent of the farmers indicated they use organic fertilizer, and 60 percent of the farmers apply fertilizer to over 75 percent of their farm. Similarly, in Ecuador, 100 percent of the farmers indicate they use organic fertilizers, yet only 5 percent of the farmers use it on over 75 percent of their farm. Across all countries, barriers mentioned to expanding this use of organic fertilizer were associated with the costs and know-how of using organic fertilizer.

FIGURE 3.3

Percentage of farmers using organic fertilizer practices.



In Côte d'Ivoire, fertilizer expenses account for 55 percent of total farm costs, highlighting it as the largest expenditure. While fertilizer costs vary in different countries, they remain substantial across the board, with Ghana at 31 percent of total farm costs, then Mexico closely following at 30 percent, with Brazil at 27 percent, and Ecuador at 19 percent. These costs represent a substantial barrier, impeding broader adoption and underscoring the need for strategies to mitigate these financial burdens to enhance regenerative farming practices across these regions.

INTEGRATED PEST MANAGEMENT AND INTEGRATED WEED MANAGEMENT

Herbicides and weedicides can have negative impacts on the environment and human health. Farmers are supported in working towards a reduction—if not total elimination—of chemical pesticides, herbicides and weedicides. Farmers across the five countries reported using a mix of practices to manage the pests, diseases, and weeds on their farms. The most common method mentioned to prevent pests and diseases is still the use of pesticides. However, besides pesticides, between 89 percent and 34 percent of the farmers in Brazil and Ecuador respectively indicated they applied pruning as a method to reduce pesticides use. In Brazil and Mexico, it is the most frequently reported method. Producers across the five countries apply pesticides between one and three times a year when needed.

Across the monitored countries, manual labor, motor tools, and herbicides are used to manage weeds, indicating a varied approach.88 percent of the farmers in Brazil, and 59 percent of the farmers in Ecuador, indicated that the motor tool was their most common weeding method. In comparison, 99 percent of ther farmers in Côte d'Ivoire, Ghana, and Mexico, reported that manual weeding was the most frequently used method. This indicates a difference in technology levels between the countries' farming practices. The use of herbicides was reported as limited in West Africaused by only 18 percent of the farmers in Ghana and 12 percent in Côte d'Ivoire. In Latin America, the use of herbicide was slightly more common, with between 36 percent and 43 percent of the farmers indicating they had used herbicides in 2023. Of the farmers who reported using herbicides, most reported using it one or two times a year.


Photo by Nu Image Communications

CHAPTER 4: INCOME

Cocoa farmers face significant challenges in earning a living income.[20] To understand the economic situation of the cocoa farmers in the Nestlé Cocoa Plan, data regarding farmer income was collected in all five countries.[21] A cocoa farming family's income is determined by a combination of the cocoa revenue (cocoa production multiplied by cocoa price) and the total non-cocoa family income. The net household income is then calculated by subtracting the costs of production from the total family revenue. In this chapter we will look closer at these components.

COCOA PRODUCTION COSTS

Across the five countries, the largest drivers of cocoa farming costs were reported to be costs associated with labor and fertilizer. In all countries aside from Côte d'Ivoire, labor costs were the largest reported cost cocoa farmers incurred—on average contributing between 74 percent (in Ecuador) and 32 percent (in Brazil) of total costs. Fertilizer costs followed closely, contributing to between 55 percent of the total costs in Côte d'Ivoire and 19 percent of the total costs in Ecuador. Finally, farmers reported some costs for agrochemicals, but these were significantly lower than the costs reported for labor and fertilizer.

COCOA REVENUE

The cocoa revenue farmers earn is determined by the price farmers were able to receive for their cocoa and the cocoa production.

When looking at the price cocoa farmers receive for their cocoa, we see large differences between how this price is set in West Africa and Latin America. In Ghana and Côte d'Ivoire, the farmgate price for cocoa is determined by their respective governments. The benefit of this approach is that it protects the farmers from price drops on the cocoa market. However, the farmgate price reported by farmers in Ghana has remained GHS Cedi10.56/kg (US$0.77/kg) and in Côte d'Ivoire the price has varied slightly between a minimum of CFA 825/kg (US$1.35/kg) in 2022 and maximum CFA918/kg (US$1.49/kg) in 2021. Both governments have indicated that in response to recent increases in cocoa prices on the market, they will be raising the farmgate cocoa prices in 2024. [22,23] In Latin America this is organized in a different way, where prices are determined through either fixed contracts or the daily cocoa price, and as a result, there is a higher fluctuation in the price the farmers receive.

COCOA VS NON-COCOA INCOME

The extent to which cocoa-farming families are dependent on cocoa as their main source of income also differs across different countries. In West Africa, cocoa is the main source of income for these families, contributing to above 70 percent of family income. This is also the case in Brazil, where larger cocoa farms contribute 70 percent of the household's income on average. On the other hand, in Mexico and Ecuador, cocoa only contributes to 25-50 percent of the household income. Other sources of income in these countries include other crops and livestock, financial assistance, and other non-farm income.

CONCLUSION

The Nestlé Cocoa Plan continues to support nearly 180,000 cocoa farming families in its key sourcing countries across three pillars – Better Farming, Better Lives, Better Cocoa. This program has supported cocoa communities by providing required inputs—like shade tree seedling— and training on best agriculture practices.

Nestlé's Income Accelerator Program aims to support cocoa farming families in closing the living income gap. In West Africa, this program was already working with 30,000 farmers in Côte d'Ivoire, and in 2023 this program was been scaled to Ghana, where it has started work with 2,000 farmers.

Looking forward, increased emphasis will be put of the importance of building the cocoa farmers' resilience. With increased frequency of extreme weather events in cocoa-producing regions effecting yield and agricultural practices, supporting cocoa farmers in adopting regenerative agriculture practices can help alleviate these pressures.

The Rainforest Alliance's tailored monitoring and evaluation program will continue to support Nestlé with its sustainability ambitions for their cocoa supply chain.

ENDNOTES

1 https://www.rainforest-alliance.org/in-the-field/creating-resilient-ecosystems-and-transforming-rural-cocoa-economies-in-Côte-divoire-and-ghana-project-profile/

2 A representative sample is taken by the Rainforest Alliance of the farmers who are part of the Nestlé Cocoa Plan through a stratified, random sampling, based on the geographical area, agriculture methods used, and cooperatives the farmers are part of.

3 https://worldcocoafoundation.org/focus-areas/farmer-income

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5 https://oxfamilibrary.openrepository.com/bitstream/handle/10546/600528/dp-womens-rights-cocoa-sector-good-practice-100316-en.pdf;jsessionid=EABFE1B7DB9432B21EED23DE94F52A5C?sequence=4

6 To be considered having "sufficient adoption" of GAPs, you must be considered adopting at least 4 of 5 GAPs, one of which must be pruning.

7 To be considered having "sufficient adoption" of GAPs, you must be considered adopting at least 4 of 5 GAPs, one of which must be pruning.

8 More information on the impact of the Income Accelerator program can be found here: https://www.nestle.com/sites/default/files/2023-07/income-accelerator-program-progress-report-july-2023.pdf

9 https://www.kit.nl/institute/publication/nestle-income-accelerator-program-progress-report/

10 https://www.ghanabusinessnews.com/2022/01/12/weather-changes-affecting-cocoa-production-farmers-feeling-the-impact/

11 https://www.confectionerynews.com/Article/2023/09/11/Ghana-s-President-raises-cocoa-farmgate-price-to-combat-smuggling-and-weak-cedi

12 https://www.confectionerynews.com/Article/2023/09/11/Ghana-s-President-raises-cocoa-farmgate-price-to-combat-smuggling-and-weak-cedi

13 https://stories.mightyearth.org/voice-network-agroforestry-in-cocoa/index.html

14 https://wwfeu.awsassets.panda.org/downloads/cocoa_report___wwf___12_2006.pdf

15 https://www.nestle.com/sustainability/nature-environment/regenerative-agriculture

16 Rodriguez Suarez et al., "Cacoa agroforestry systems improve soil fertility: Comparison of soil properties between forest, cacao agroforestry systems, and pasture in the Colombian Amazon" (2021)

17 Niether et al., (2020a)

18 Vaast and Somarriba "Trade-offs between crop intensification and ecosystem services: the role of agroforestry in cocoa cultivation" (2014)

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20 https://www.wur.nl/en/newsarticle/living-income-in-cocoa.htm

21 This data was collected in 2023, before the recent price rise. It does therefore not reflect the impact of this price rise on the income of Cocoa farmers. This data also does not include data of farmers who are part of the Income Accelerator program. Find more information on the impact of the Income Accelerator program here: https://www.Nestlé.com/sites/default/files/2024-04/income-accelerator-program-progress-report-summary.pdf

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