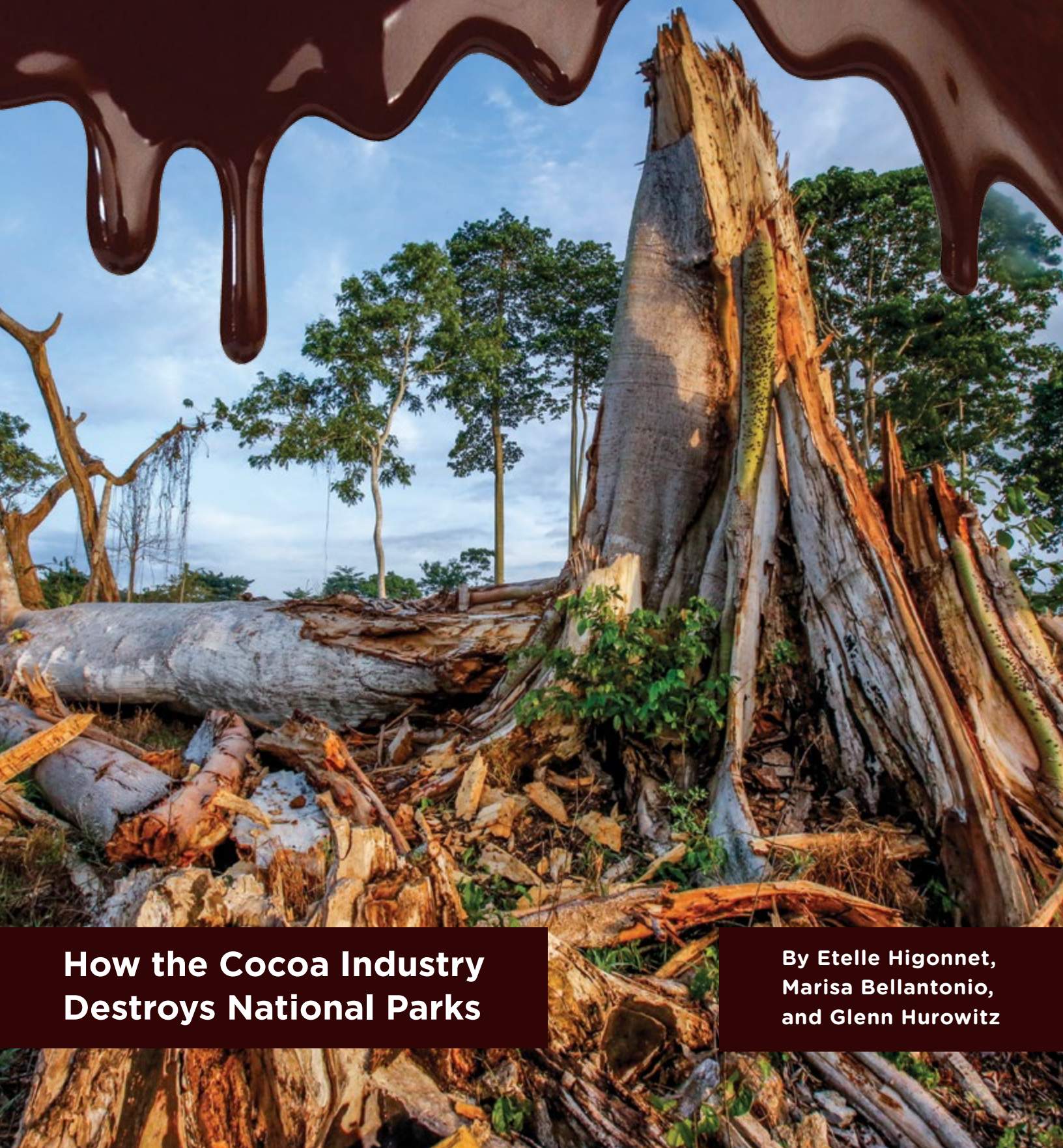


CHOCOLATE'S DARK SECRET



**How the Cocoa Industry
Destroys National Parks**

**By Etelle Higonnet,
Marisa Bellantonio,
and Glenn Hurowitz**



Acknowledgments

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Chocolate is everywhere. It is the afternoon pick-me-up, the sensual indulgence, the accoutrement to seduction. Lovers gift truffles, skiers sip on rich hot chocolate, and connoisseurs savor the tiniest, richest bite of single origin dark chocolate. The ancient Aztecs believed that chocolate was an aphrodisiac, and the emperor Montezuma was reported to gorge himself on chocolate in advance of his trysts.

But chocolate is truly a guilty pleasure. Thousands of miles away from the American and European homes where the majority of the world's chocolate is devoured, lies the denuded landscape of West Africa's Ivory Coast. The nation is the world's largest producer of cocoa, the raw material for chocolate. As its name suggests, elephants once abundantly roamed the rainforests of Ivory Coast. Today's reality is much different: many of the country's national parks and conservation lands have been cleared of their forest to make way for cocoa operations to feed demand from large chocolate companies like Nestlé, Cadbury, and Mars.

Mighty Earth conducted an in-depth global investigation into the cocoa that provides the raw material for chocolate. These companies purchase the cocoa for their chocolate bars from large agribusiness companies like Olam, Cargill, and Barry Callebaut, who together control around half of global cocoa trade.

Most strikingly, the investigation found that for years the world's major chocolate companies have been buying cocoa grown through the illegal deforestation of national parks and other protected forests, in addition to driving extensive deforestation outside of protected areas. In the world's two largest cocoa producing countries, Ivory Coast and Ghana, the market created by the chocolate industry has been the primary driver behind the destruction of forests.

Many of Ivory Coast's national parks and protected areas have been entirely or almost entirely cleared of forest and replaced with cocoa growing operations. In neighboring Ghana, the situation is



Far from its origins in West Africa, chocolate is seen as a luxury good in North America and Europe and is often advertised as a sensual treat.



Mighty Earth's Investigation

Mighty Earth's team visited multiple protected areas inside Ivory Coast and found illegal cocoa production had completely overtaken areas that had previously been covered by forests.

Source: UNEP-WCMC (2017). Protected Area Profile for Côte D'Ivoire from the World Database of Protected Areas, July 2017. Available at: www.protectedplanet.net



similar: according to our analysis, 291,254 acres of protected areas were cleared between 2001 and 2014. In that same time, Ghana lost 7,000 square kilometers of forest, or about 10 percent of its entire tree cover; approximately one quarter of that deforestation was connected to the chocolate industry. Without action, Ghana stands to lose all remaining forests outside its national parks in the next decade. Chimpanzees, elephants, and other wildlife populations have been decimated by the conversion of forests in both countries to cocoa; in Ivory Coast, only 200-400 elephants remain from an original population of hundreds of thousands.

Now, the chocolate industry is bringing its unsustainable model of production to new forest frontiers in other parts of Africa, Latin America and Southeast Asia.

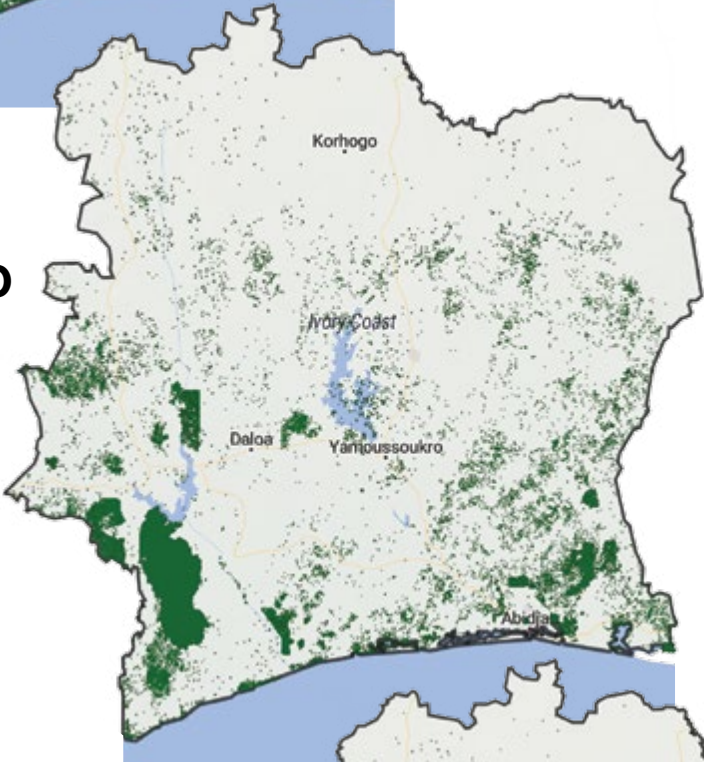
Fortunately, the world's largest chocolate companies have begun to publicly acknowledge their responsibility to address deforestation. In early 2017, 34 leading chocolate companies joined Prince Charles to pledge that they would announce a plan in November 2017 to end deforestation in the industry. However, they provided no details about their plan. It may be premature to be optimistic, as previous cocoa sustainability initiatives have been too weak to produce significant industry-wide results. This report shows that the chocolate industry must immediately end its illegal and destructive practices, remediate past damage, and take concrete action to ensure that its mistakes in Ivory Coast are not repeated.

1990

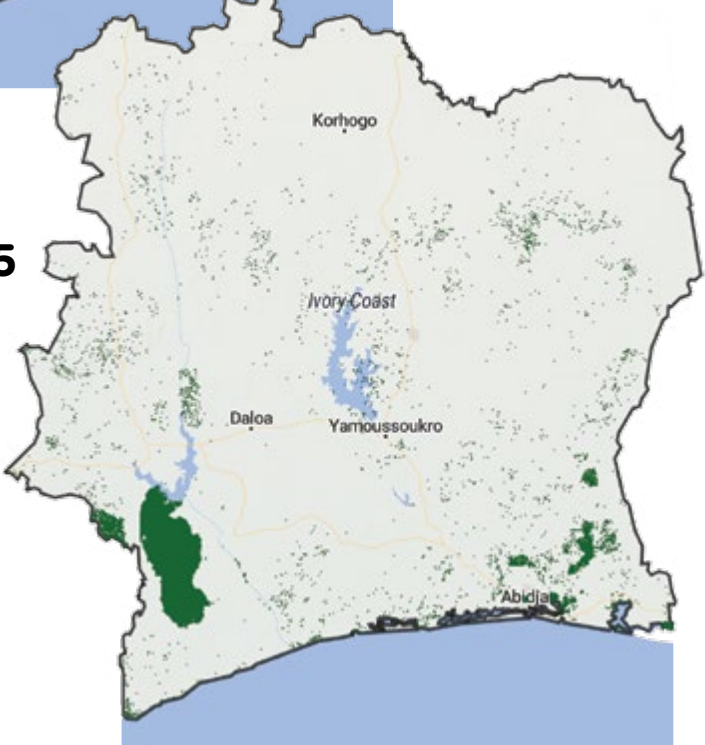


Forest Cover in Ivory Coast, 1990–2015

2000



2015





A selection of chocolate from some of the world's largest chocolate companies including Mars, Hershey's, Nestlé, Mondelez, Lindt and Ferrero. We found these companies connected to cocoa from sources linked to illegal deforestation. Credit: Alex Costa for Mighty Earth, 2017.

Big Business, Big Impact

Chocolate is big business—in 2015 the global market was approximately \$100 billion. Each year, the world consumes close to 3 million tons of chocolate and other cocoa products, and demand goes up by 2-5%. Most of the world's chocolate is manufactured and consumed in Europe and North America, far from the fields in West Africa where the majority of cocoa is grown. In the developed

world, chocolate is seen as an affordable luxury that gives ordinary people a taste of sensuous delight at modest cost. But in West Africa, chocolate is rare and unaffordable to the majority of the population. Most Ivorian cocoa farmers have never even tried chocolate. Nonetheless, it is in West Africa and the world's other cocoa producing regions that chocolate has its biggest impact.

The Cocoa Heartland

Much of Ivory Coast was densely covered by forests when it achieved independence in 1960, making it prime habitat for forest elephants and chimpanzees. Ivory Coast once boasted one of

the highest rates of biodiversity in Africa, with thousands of endemic species. However, the chocolate industry's sourcing practices have eliminated much of this forest. According to



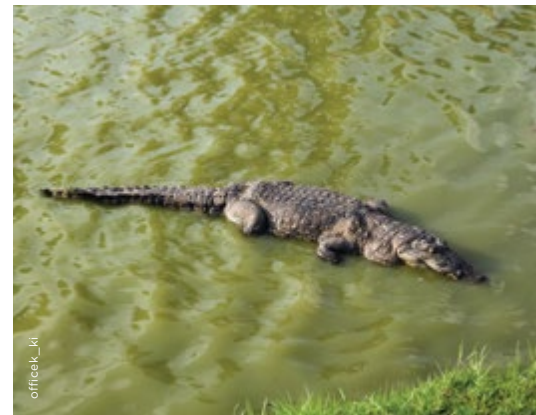
Forest elephants from Ivory Coast. Credit: Thomas Breuer

Ivorian government statistics and maps, less than 11 percent of the country remains forested, and less than four percent remains densely forested.¹

The cocoa industry in Ivory Coast has not been content with landscapes it was able to clear legally; in recent years, it has pushed large-scale growing operations into the country's national parks and other protected areas. Needless to say, clearing forest to produce cocoa within protected areas violates Ivorian law. A study conducted by scholars from Ohio State University and several Ivorian academic institutions examined 23 protected areas in Ivory Coast, and found that seven of them had been almost entirely converted to cocoa. More than 90% of the land mass of these protected areas was estimated to be covered by cocoa.

The cumulative impact of the chocolate industry's deforestation has caused Ivorian wildlife populations to plummet. Chimpanzees are now found in just a few pockets throughout the nation and are considered an endangered species. The Ohio State study found that 13 of 23 Ivorian protected areas had lost their entire primate populations; in five areas, half the primate species had disappeared. Elephants, the country's national symbol—plastered on every 'Ivoire' beer bottle and 'Elephants' soccer team jersey—are on the verge of total disappearance. While poaching is a major part of the threat to elephants, cocoa-driven deforestation has pushed elephants into tiny corridors of forest, making them easier for poachers to track down and slaughter. Other animals in Ivory Coast are also threatened as they rapidly lose their last habitats, including pygmy hippos, flying squirrels, pangolins, leopards and crocodiles.

¹ The Ivorian government's official submission to the UN Food and Agriculture Organization includes degraded forests in its definition of forest, and reports that 10.6% of the country remains forested.



Clockwise from left: Skeleton trees, pygmy hippopotamus, crocodile, Olive Colobus.

Tracking Cocoa from its Source

We traveled to Ivory Coast to see first-hand the origins of the chocolate consumed around the world, identify which companies are responsible for the industry's invasion of the country's protected areas and other deforestation, and develop solutions that can ensure that the cocoa industry can grow without repeating its terrible mistakes. Mighty Earth's team visited three protected areas: Goin Dèbé Forest, Scio Forest, and Mt. Péko National Park. In addition, we worked with a team that visited Mt. Sassandra Forest, Tia Forest, and Marahoué National Park, which shared their findings with us.

Through the investigation, we found three of the world's largest cocoa traders—Olam, Cargill, and Barry Callebaut—buying cocoa grown illegally in protected areas. These traders are responsible for selling cocoa to the world's largest chocolate companies like Mars, Hershey, Mondelez, Ferrero,

and others. And while these three traders were the ones for which we found strong evidence confirming their purchases of cocoa from protected areas, it is likely that other traders engage in similar practices.²

The investigation found that illegal deforestation for cocoa is an open secret throughout the entire chocolate supply chain. The process of deforestation for cocoa starts with settlers who invade parks and other forested areas. These settlers then progressively clear the underbrush of forests by cutting down or burning existing trees. The photos presented here document how this unsustainable form of cocoa production leaves behind what are known as skeleton forests: trunks denuded of their crowns and leaves that remain in the cocoa monocultures as ghostly reminders of the great forests that once reigned.

With the forests gone, the settlers then plant cocoa trees, which take years before they are ready for harvest. Each cocoa tree bears two harvests of cocoa pods per year. When cocoa is ready to be harvested, farmers hack off the ripe cocoa pods from the trees with machetes. They split open the pods to remove the cocoa beans, which they then sort through and place into piles. The beans are left in the sun to ferment and dry; this is when the beans turn brown.

It is at this point that a first level of middlemen called “pisteurs” buy the cocoa beans from the settlers, transport it to villages and towns across the cocoa-growing region, and sell them onto another set of middlemen, known as cooperatives. The cooperatives then either directly or through a third set of middlemen bring the cocoa to the coastal ports of San Pedro and Abidjan, where it

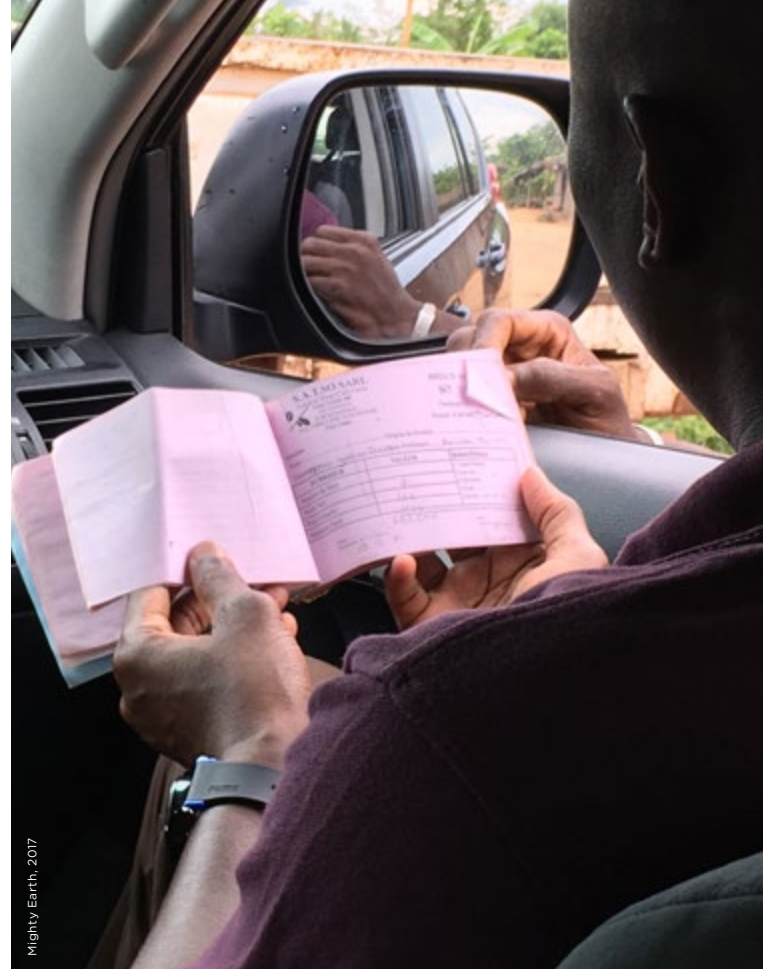
is sold to Olam, Cargill, and Barry Callebaut, who ship the cocoa to chocolate companies in Europe and North America.

Throughout this path, the illegal origin of the cocoa is apparent. We visited entire illegal towns and villages called ‘campements’ that have sprung up inside Ivory Coast’s national parks and protected forests. Even though these settlements are within protected areas, some boast tens of thousands of residents, along with public schools, official health centers, mosques, churches, stores, and occasionally cell phone towers, in plain sight of government authorities. Pisteurs openly admitted to us that they bought cocoa from inside national parks and protected forests. Owners of cooperatives within the illegal towns spoke openly about sourcing cocoa from protected areas as well. Cocoa traders and chocolate companies alike told

Growers sort through cocoa pods in Mt Péko National Park.



2 During the course of our investigation, an armed rebellion broke out that shut down roads and prevented our field team from reaching some of the key cocoa growing areas where additional traders operate, so their activities were not fully analyzed by this investigation.



Left: One of the cocoa growing villages in Scio Classified Forest. Right: Receipt for cocoa linked to deforestation in Scio.

us they were aware that significant amounts of the cocoa they purchase from Ivory Coast was likely illegally grown in protected areas. The director of the government's Forest Reserve protection agency (Sodefor) estimates that 40% of Ivorian cocoa comes from protected areas.³

Inside the Scio Classified Forest, for instance, we visited a trading village called Sada, which boasts approximately 22 cocoa stores and warehouses, thousands of inhabitants, mosques, dozens of shops, and even a school and health center. Here, we met a pisteur named "Jean-François,"⁴ who described how he would purchase cocoa from within Scio. Hours later, we met Jean-François again in the SAFSO SARL cooperative in Sada, arranging a sale of cocoa. In addition, we accessed a receipt from a cocoa

warehouse inside the park that documented a sale of cocoa to the SAFSO cooperative.

In the larger trading town of Duékoué, we visited the 'Porgo' warehouse, and spoke to the owner, the eponymous Porgo. He brought us past a throng of men sifting cocoa and moving heavy bags into trucks, to his back office, and recounted his experiences as a grower and buyer. During the conversation, he reported buying cocoa from the Northeast corner of Scio and then selling it to the cocoa giant Barry Callebaut through their operations in San Pedro and Abidjan. Employees of other large cocoa warehouses in Duékoué also described how their cocoa is transported to the ports of San Pedro or Abidjan, where it is sold to the international cocoa traders Olam and Cargill.

³ Researchers estimate that approximately 195,600 tons of cocoa were produced just in the 23 protected areas the researchers analyzed in 2015 alone. There are 244 protected areas in Ivory Coast in total, suggesting that the volume of illegally grown cocoa is far greater.

⁴ A pseudonym.

In Western Ivory Coast, we visited cocoa stores in the crossroads village known as “Paris,” which sits at the edge of the Goin Débé protected area. This is one of the key points where cocoa from inside Goin Débé gets consolidated and loaded onto trucks for transport to larger towns. Workers we interviewed at this crossroads told us that their cocoa goes to Guiglo’s Scoagg cooperative.

In Guiglo, staff at the Scoagg cooperative, controlled by a man known as “Hassan,” confirmed that they source from Scio. Scoagg staff also reported that they sell their cocoa to Cargill. Another Goin Débé pisteur reported selling cocoa from the protected

area to Cargill via the trading houses Chifousseini and another nicknamed “NASA” in Guiglo.

All in all, we identified seven cooperatives which bought cocoa from protected areas that we visited and which confirmed that they sold their cocoa on to the major international traders Cargill, Olam, and Barry Callebaut. Clearly, these traders are the ones responsible for creating a market for illegally grown cocoa, setting the standards for cocoa production throughout the region, and for the raw materials that end up in chocolate bars consumed around the world.

The Flow of Cocoa

This map tracks the path of cocoa from illegal deforestation leaving the country.



Source: Mighty Earth 2017 Investigation

Map source: UNEP-WCMC (2017). Protected Area Profile for Côte D'Ivoire from the World Database of Protected Areas, July 2017. Available at: www.protectedplanet.net





World's Largest Chocolate Companies Turn a Blind Eye

The results of our investigation implicate almost every major chocolate brand. The chart on the opposite page shows the links between large chocolate companies and the cocoa traders.

Before releasing this report, we shared the findings of our investigation with 70 chocolate companies. In their responses, none of the companies denied sourcing cocoa from protected areas or disputed any of the facts we presented. Some companies even acknowledged the need

for further action, but few outlined specific steps they would take. Cargill stated: “The mapping your organization has undertaken complements the data we have gathered and the results of our research indicate significant and increasing tree cover loss in West Africa’s cocoa-producing regions. While not all of this loss is directly attributed to cocoa production alone, it provides a picture of where tree cover loss is occurring and the risk to the sustainable sourcing of cocoa.”

The Government’s Role

The fact that companies like Cargill, Olam, and Barry Callebaut have been able to create a market for cocoa grown in national parks and other protected areas for decades has not happened in a vacuum. These companies have taken advantage of lack of enforcement and corruption within the Ivorian government.

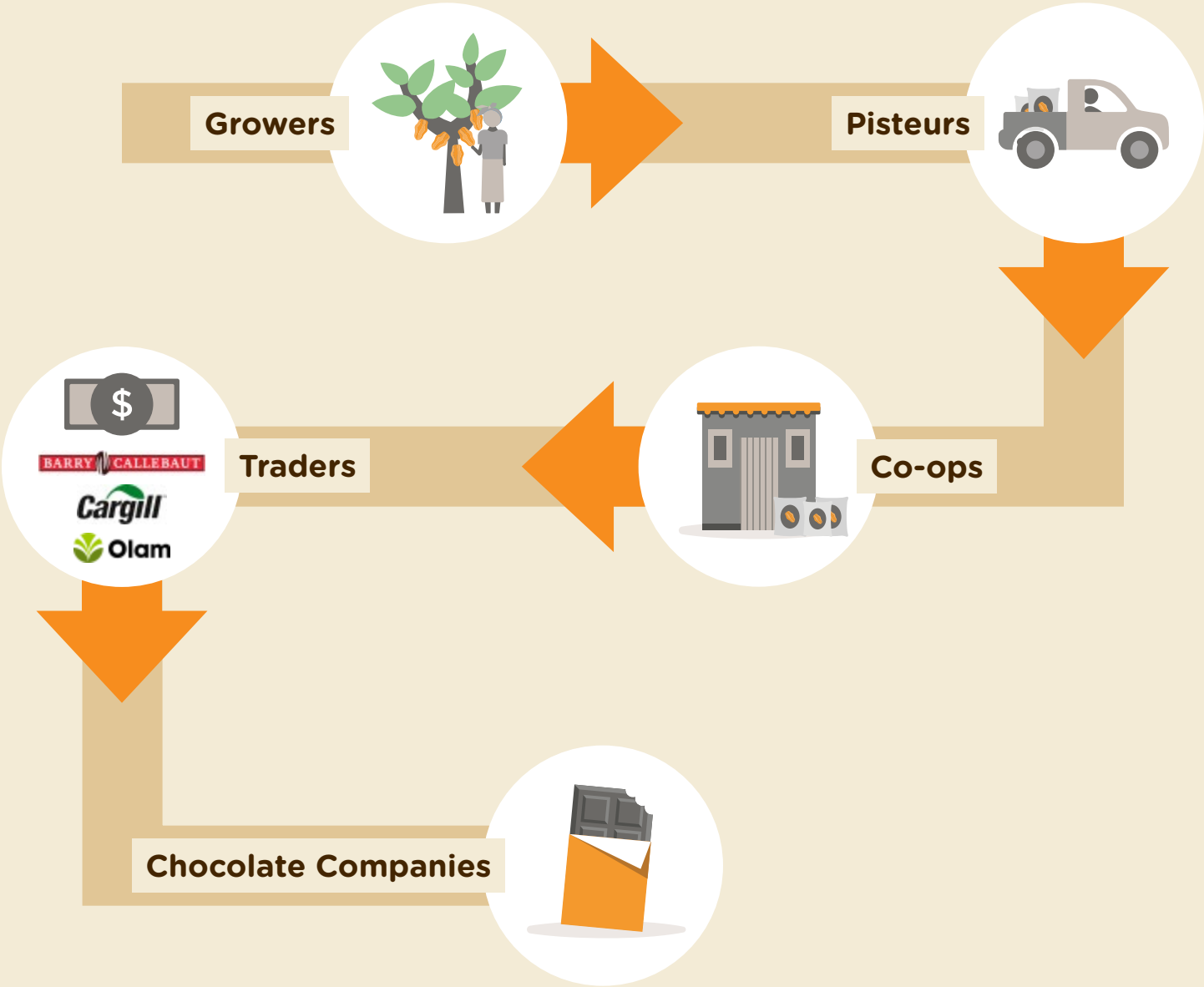
The Ivorian Office of Parks and Reserves (OIPR) is in charge of protecting parks and certain other areas, while the forest development agency Sodefor

is responsible for safeguarding the classified forests. While OIPR’s administration of national parks clearly could improve dramatically, this agency has succeeded in keeping some parks relatively free from cocoa and other deforestation threats. On the other hand, Sodefor’s “classified forests” have a 4.2% deforestation rate, meaning that if the same rate of forest destruction from 1990-2015 were to persist, all Ivorian primary forests would disappear within a few decades.

Sign on cocoa certification at the edge of Scio Classified Forest, which has been overtaken by illegal cocoa production.



How cocoa moves through the supply chain





Where is the money from your chocolate bar going?

Source: Cocoa Barometer, 2015.

44.2%
Retail

35.2%
Chocolate manufacturer

7.6%
Grinding & processing

6.6%
Cocoa farmers

4.3%
Taxes & marketing board

2.1%

Transportation & traders



Chocolate's Human Impact

Between five and six million people, largely smallholders, grow cocoa around the world. In Ivory Coast, cocoa farmers earn around 50 cents per day and in Ghana around 84 cents per day. Farmers are shortchanged since chocolate's revenue and profits are strongly skewed towards traders and manufacturers. The revenue distribution has only gotten worse: In the 1980s, farmers received an average of 16% of the value of a chocolate bar. today, that number is 6.6%. In comparison, 35% goes to chocolate companies and 44% goes to retailers like supermarkets.

Additionally, the chocolate industry is notorious for labor rights abuses including slave labor and child labor. According to the US Department of Labor, "21 percent more children are illegally laboring on cocoa farms in Ghana and The Ivory Coast than five years ago." An estimated 2.1 million West African children are still engaged in dangerous, physically taxing cocoa harvesting. Rather than eliminate the problem, the industry has merely pledged to reduce child labor in Ivory Coast and Ghana by 70% by 2020.

Cocoa farmers' daily wages in Ivory Coast

54¢

Cocoa farmers' daily wages in Ghana

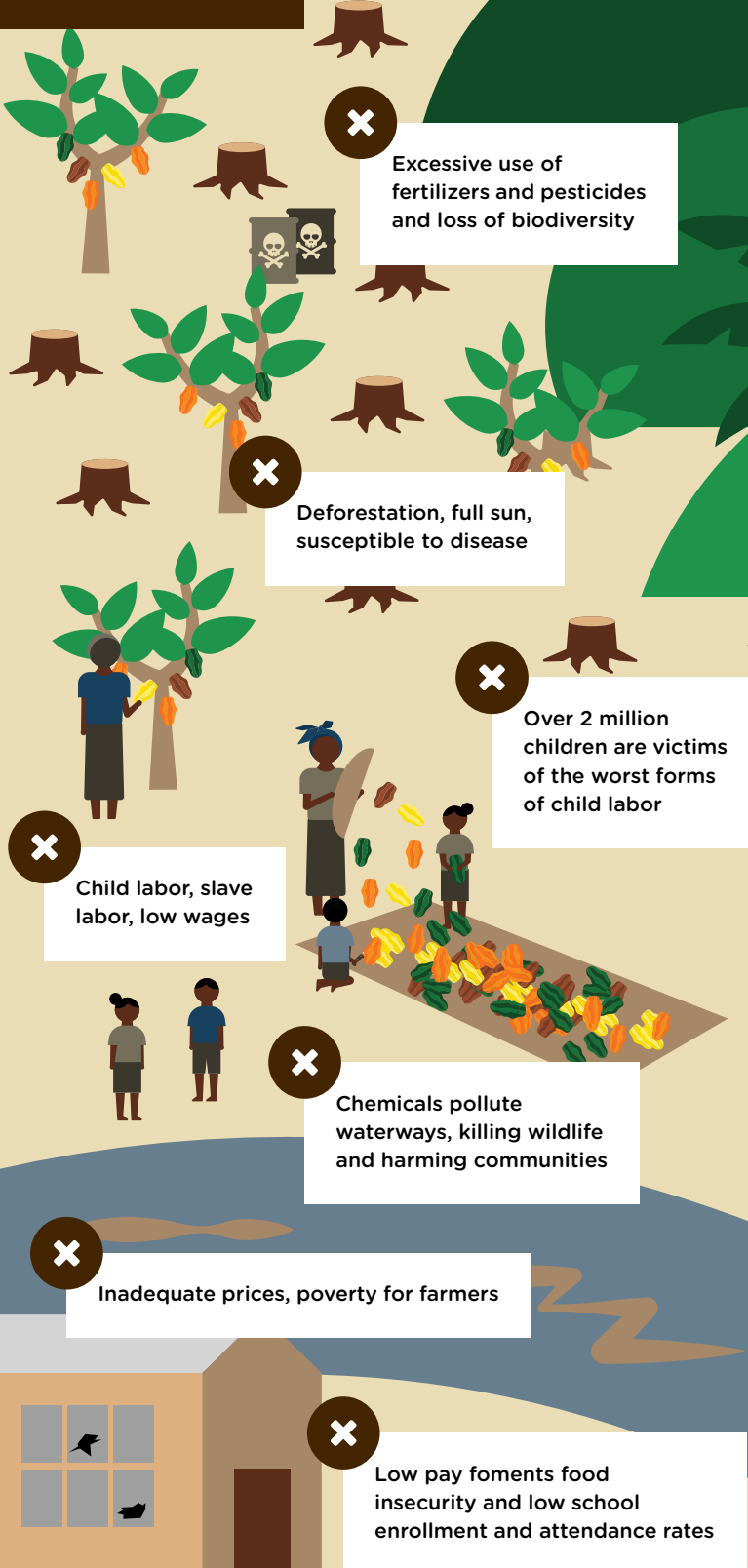
82¢



There are 5-6 million cocoa farmers worldwide.

Nearly all farmers in Ivory Coast and Ghana live under the poverty line.

Current Practice



Sustainable Practice





These problems of the government's failure to effectively address massive, rapid deforestation were strongly criticized in a March 2017 letter to the Ivorian Prime Minister, by the European Union, France, Germany's aid agency GIZ, and the United Nations in Ivory Coast.

Many people we interviewed in Ivory Coast said that Sodefor is actively profiting from illegal deforestation. In the words of one farmer we interviewed in Goin Dèbé, "Sodefor comes and asks for money, and then if you give it, there is no problem. Sodefor just tells us to grow the cocoa a few meters away from the road so that the road looks forested."

The government of Ivory Coast took action recently against cocoa-driven deforestation by expelling cocoa farmers from Mount Péko

National Park (which means "mountain of hyenas" in the local Gueré language). According to a report by Human Rights Watch and the Ivorian Coalition of Human Rights (RAIDH), the evictions were poorly planned and carried out in violation of human rights standards. When we visited Mount Péko after the eviction, we found the park once again filled with cocoa smallholders who had returned. Some smallholders explained to us that when they finally returned to Mount Péko, they simply paid the authorities higher bribes to go back to cultivating their lands in the park.



The government clearly needs to improve its well-motivated efforts to more effectively restore the parks and other protected areas to their conservation mission while protecting human rights.

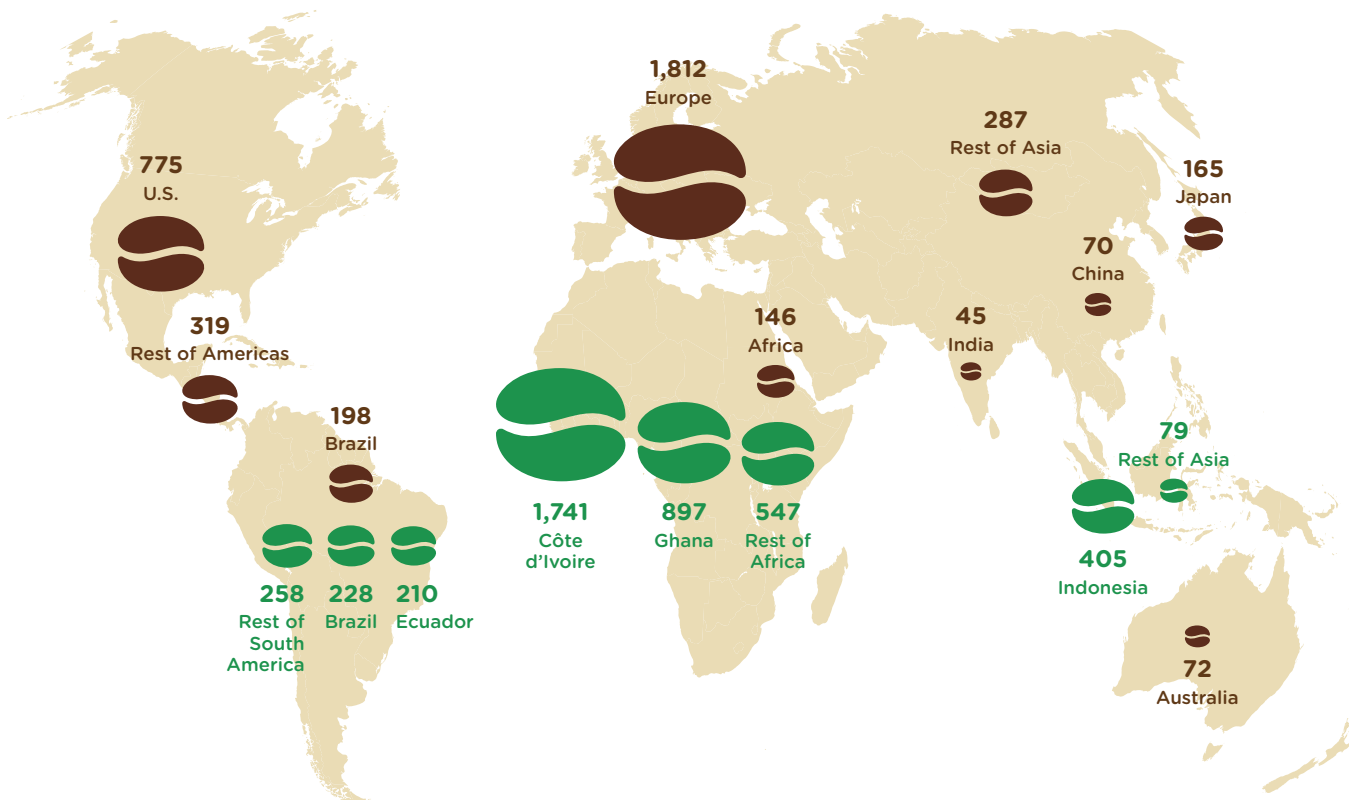
Left: Smallholder farmer opening cocoa pod grown in Mt. Péko National Park. Right: Ancient trees in Scio Classified Forest cut down and awaiting logging trucks.



Global cocoa production and consumption

Cocoa production or consumption in 1,000 tons, 2013-14

 Consumption  Production



Source: Cocoa Barometer, 2015; ICCO 2014.

Cocoa's Next Frontiers

With demand for chocolate rising by two to five percent each year, the chocolate industry has aggressively expanded to other rainforest nations around the world. In many places, it has exported the same bad practices that contributed to the destruction of West Africa's forests.

Indonesia is notorious for deforestation for palm oil, timber, and paper, but cocoa is big business as well. Between 1988 and 2007, 1.7 million acres of Indonesian forest were cleared for cocoa production, equivalent to nine percent of the nation's total deforestation for crops. Much of this deforestation has destroyed orangutan, rhino, tiger, and elephant habitat.

Cocoa is also becoming a driver of deforestation in the Congo Basin, the most intact of the world's great rainforests. A recent study in the Democratic Republic of the Congo examined the four major cacao growing regions, and found that cacao expansion could lead to the loss of 176 to 395 square kilometers of forest in the next decade, especially in the Equatorial Province towns of Mbandaka, Bikoro and Lukolela.

In South America, especially Peru, there has been a nearly five-fold increase in cocoa production between 1990 and 2013. Satellite images in 2012 showed a cocoa company, United Cacao, destroying nearly 5,000 acres of land for a cocoa plantation, encroaching on the carbon-rich, biodiverse Amazon rainforest in Peru.



Cocoa and Climate

Combined, deforestation for cocoa has a significant impact on climate. Tropical rainforests such as the ones being destroyed for cocoa production have among the highest carbon storage of any ecosystem on the planet. When they are cleared, they release enormous amounts of carbon into the atmosphere. From 1990 to 2008, the 27 member states of the EU imported an estimated 1.48 million acres of

deforestation embedded in cocoa production, which is equivalent to around 8% of EU27's imported deforestation. Indeed, a single dark chocolate bar made with cocoa from deforestation produces the same amount of carbon pollution as driving 4.9 miles in a car—an outsized impact for a small afternoon treat.

A Sweeter Future?

The tragedy of this deforestation is that it is entirely avoidable. Instead of driving investment in expansion into forests or national parks, cocoa companies should be focusing their resources on shade-grown cocoa production and yield improvement.

In West Africa, the chocolate industry has mostly relied on clearing forests and growing cocoa in full sun to boost short-run productivity. However, shade-grown cocoa (cocoa grows naturally under the forest canopy) promotes nutrient cycling, erosion control, water regulation, nitrogen fixing, crop pollination, and reduced weed growth. And

shade-grown systems can actually have higher average productivity over the full life cycle of a cocoa tree. Additionally, large cocoa companies can do more to improve productivity through better water distribution and grafting techniques, among other best practices.

To the extent that any additional expansion on new land is still necessary, there are more than 300 million acres of previously deforested lands across the tropics where crops like cocoa can be grown without threatening new deforestation.

Cocoa in the port town of San Pedro.



Taï National Park is the Ivory Coast's most preserved protected area and remains a biodiversity gem.





Large parts of the palm oil, paper, sugar, soy, and rubber industries have adopted a strict methodology, known as the High Carbon Stock Approach, to target development onto degraded land. Cocoa and chocolate companies including Cargill, Olam, Nestle, Mondelez, Mars, Ferrero Rocher and Hershey already apply that criterion to their palm oil purchases. Deforestation for cocoa is no more acceptable than deforestation for other commodities, which is why these companies should immediately extend their High Carbon Stock conservation commitments to cocoa as well.

Based on similar situations in other commodities, the cost for these improvements is unlikely to cost more than a few additional cents for every chocolate bar. Indeed, companies that shift to deforestation-free agricultural production often identified significant efficiencies that allowed them to increase profitability. Many traders shifting to sustainable production also attracted increased market share from manufacturers willing to pay for environmentally responsible raw material supplies.

Several chocolate companies have launched small-scale sustainability initiatives through the years; however, as this investigation shows, those initiatives have been inadequate to stop even the most egregious industry practices like sourcing from legally protected forests. Even certification programs that chocolate companies use to promote their products as sustainable were found to have mostly failed to make a significant difference on a national level, according to a 2016 study by the Bureau for the Appraisal of Social Impacts for Citizen Information (BASIC).

Fortunately, many major cocoa companies are beginning to acknowledge the need for more comprehensive action. In the first half of 2017, Prince Charles launched an initiative with 34 of the world's biggest chocolate and cocoa companies to end deforestation. However, the companies have not provided any details about their plans, which are due out later this year. For instance, they have not committed yet to ensuring that any future

expansion is done without deforestation in order to protect High Carbon Stock landscapes or what they'll do in already denuded areas like the Ivory Coast's national parks and protected areas.

The Ivorian government has also stated its strong interest in supporting conservation despite their past practices. The government has joined the United Nations program on reducing emissions from deforestation and degradation (UN-REDD) and created a national program on climate change.⁵ It has also committed to producing zero deforestation cocoa as of 2017 through the Cocoa Carboneutre initiative, but this has not been realized nor has it achieved any tangible results on the ground.

Although promises on paper have yet to translate into a reality of forest protection, there is room for optimism that the Ivorian government would support robust industry action in the immediate future to save forests. The Ghanaian government has also shown greater willingness to protect forests than in the past.

The Prince of Wales and the world's largest chocolate companies discussing an agreement to end deforestation.



5 In addition, the Ivorian Government signed the 2014 UN Climate Summit's New York Declaration on Forests, and has announced numerous other commitments to protect forests.

Recommendations for a Responsible Future for the Chocolate Industry

It's not enough to announce commitments, or adopt new policies on paper. To be effective, and to give consumers confidence that they can start feeling better about the chocolate they eat, the chocolate industry and relevant governments must adopt and fully execute detailed implementation plans—plans that should be regularly monitored and evaluated by independent third parties.

The following are principles we encourage the chocolate industry and governments to adopt.

These steps are modest in cost, but can ensure that the chocolate industry does not repeat the mistakes of its past, and can actually make a positive environmental and social impact in the future. Chocolate lovers could then finally enjoy their favorite treat without guilt.

PROTECT FORESTS, PERIOD.

The chocolate industry should end deforestation by immediately ceasing purchasing from suppliers who engage in clearance of High Carbon Stock and High Conservation Value lands. The industry should shift its supply to shade-grown cocoa.

TRANSPARENCY AND TRACEABILITY.

Major chocolate companies should make available online the identities and locations of their suppliers. Governments should also recognize and improve land tenure (including through community and farmer education), disclose any funds government agencies or personnel receive from the cocoa industry, and review cooperative designations.

JOINT ACTION.

The cocoa industry and governments should pool resources to monitor deforestation and enforce compliance with zero deforestation policies. The industry can use the successful Brazilian Soy Moratorium as a model.⁶

HUMAN RIGHTS.

Cocoa expansion should be done in ways that protect indigenous community rights, including the right to free, prior, and informed consent (FPIC). The chocolate industry and affected governments should also ensure that cocoa farmers receive a living wage, that forced labor is prohibited, and action is taken to discourage illegal child labor. Use of hazardous pesticides should be immediately eliminated.⁷

RESTORE IVORY COAST'S FORESTS.

Despite the near-total destruction of Ivory Coast's classified forests and the damages to the country's national parks, there are still more than 20 protected areas that remain forested to some degree, and which can and should be restored.⁸

For citations, please go to www.mightyearth.org/chocolatesdarksecret/citations

6 In the Brazilian Amazon Soy Moratorium, all major soy traders pooled resources to monitor deforestation, increasing accuracy and reducing costs for individual companies substantially. Agribusinesses agreed to automatically end purchases from any farmers found to be engaged in deforestation. Deforestation for soy in the Brazilian Amazon then plummeted within three years to virtually zero – and has stayed there for a decade. Meanwhile, farmers were able to expand soy production by more than six million acres during that time by focusing expansion on degraded land.

7 As defined by the Stockholm Convention and Rotterdam Convention on Persistent Organic Pollutants.

8 Priorities for restoration should include Abouderessou, Adzope, Azagny National Park, Banco National Park, Bandama-Blanc, Bandama Rouge, Beki Bosse Matie, Besso, Boa, Bolo, Comoe National Park, Dassieko, Go Bodienou, Gouari, Haute Dodo, Hein*, Iles Ehotile National Park, Irobo, Kinkene, Krozalie*, Mabi/Yaya, Mount Nimba*, Mont Peko National Park*, Mont Sangbe National Park, Mont Sassandra, N. Zodzi, N'Zo Fauna Reserve*, Nangbyon*, Nguechie*, Nibi Hana, Niegre, Orumbo Boka, Port Gautier, Scio, Suito, Songan/Tamin, Tai National Park*, Tiapleu, and Yarani. Areas with asterisks next to their names have significant remaining forest, and could be prioritized as the immediate targets for initial restoration efforts.



Only skeleton trees remain of what was once a lush tropical forest in Scio Classified Forest, cut down for cocoa.







Diana monkey near the western border of Taï National Park in Ivory Coast. Primate populations in Ivorian forests have sharply declined, often due to cocoa encroachment.