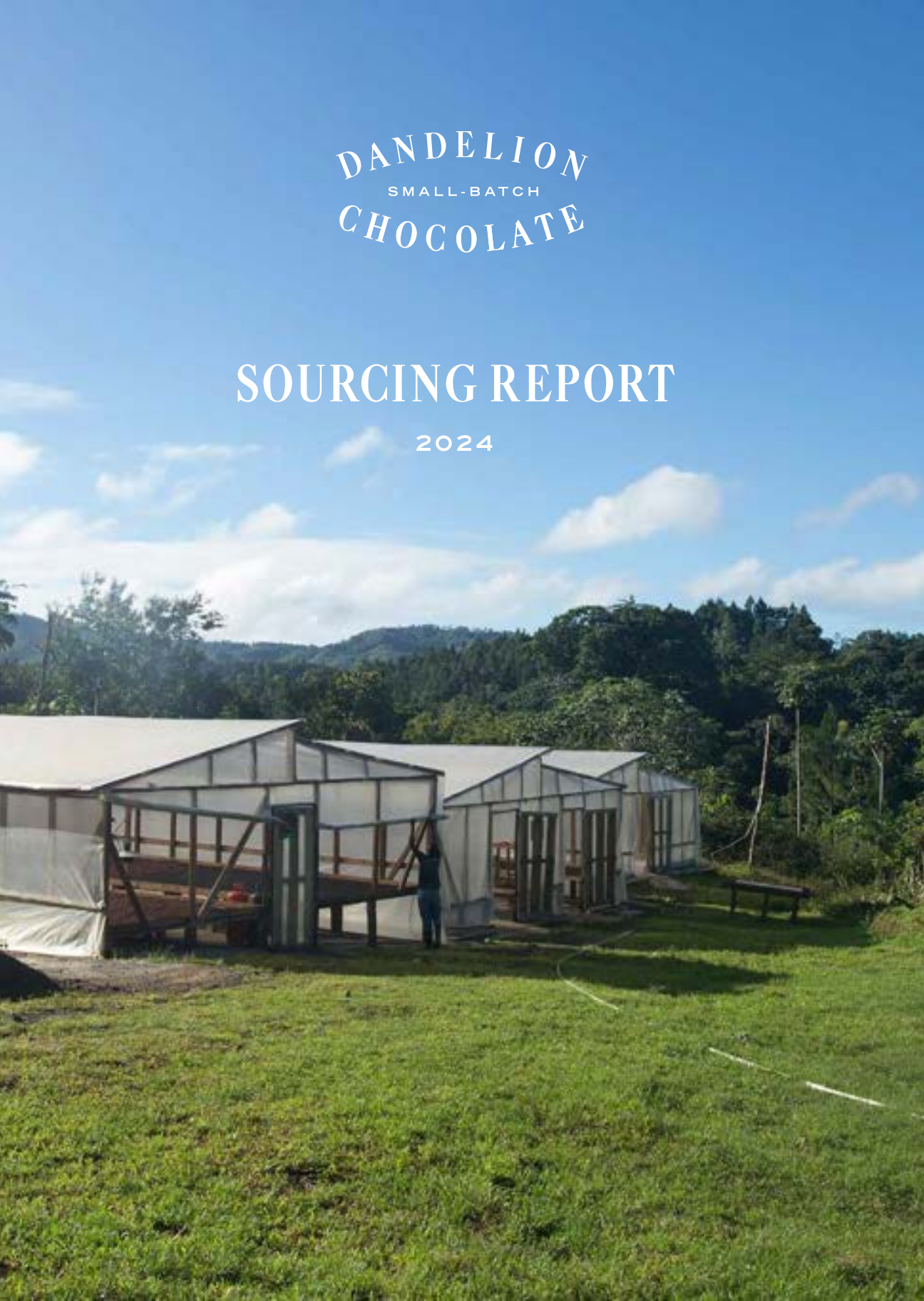
DANDELION
SMALL-BATCH
CHOCOLATE

SOURCING REPORT

2024



THE PURPOSE OF THIS REPORT

Every chocolate bar we make begins on a farm somewhere between 20 degrees north and 20 degrees south of the equator, thousands of miles from our factories in San Francisco and Tokyo. In this zone, more than 90 percent of the world's cocoa production takes place on small farms, where income is generally subject to both volatile world-market whims, and the vagaries of farming in a changing climate. Historically, it's been difficult for consumers to view the supply chain and the conditions surrounding cocoa production.

As a craft chocolate maker, we are part of a small but growing movement that seeks to make chocolate whose origins are distinct, clear, and sustainable. The following report functions as a platform to connect our producers and their practices with anyone interested in learning about where cocoa is sourced. If you buy our chocolate, you might be curious how much money reaches cocoa producers on the other end of the supply chain. If you're a producer, you may be interested in how other producers ferment, dry, or cultivate their cacao. We believe practicing transparency increases accountability, fairness, responsible stewardship, and best practices across the supply chain. We hope the information included here will serve that mission.

It's challenging to describe our relationships through metrics, and to capture cocoa supply-chain economics solely with data. In this report, we've done our best to clarify our philosophy and the value chain within which we work. People often ask us how much money makes it to the farmers; and because we buy from cooperatives, individuals, single estates, and through import companies, determining that number is complex. The amount we pay per metric tonne of beans is called the "landed cost," which includes the price paid to the producer, estate, fermentary, or company from whom we purchase the beans, as well as fees for anyone hired to import, export, or transport beans to our local storage location. The landed cost does not equal the "farm gate," which is the amount received by the person who grew the cacao. Right now, this accounting approach is the best we have, and we hope to find a more thorough way to break down costs in the future.

Our report details how each producer ferments, dries, and transports their product to us. It also shares how much cocoa we've purchased from each producer to date, and the amount we paid for that cocoa. In the end, everyone from the producers we work with to the customers who buy our chocolate is an integral part of the cocoa supply chain. Our aim here is to facilitate information flow between parties, and to empower us all to ask critical questions. Our industry is currently working to develop universal grading standards and a common lexicon to help chocolate makers and producers align practices. Clear communication will drive our industry to achieve common goals, including economic empowerment in developing communities, fair pay, and delivering the best chocolate we are able to produce.

OUR PHILOSOPHY

We strive to work directly with the producers who grow, ferment, and dry the cocoa we buy. We travel to origins as frequently as possible to learn about our producers' best practices, exchange feedback, and make sure that high standards of quality and sustainability are met. We pay a premium far above the fixed world-market price, and aim to strengthen our relationships year after year in order to maintain our collective commitment to sharing the best, most distinctive cocoa with you. We seek beans with good, consistent flavor, and partners with whom we are excited to work. We are happy to use intermediaries, as long as they add value and are paid fairly for the work they do, and as long as their payment does not come out of producers' pockets. We believe that good business practices can help foster positive social, environmental, and economic change, and we are committed to increasing transparency in both our own process, and across the supply chain.

A NOTE FROM GREG & RON

Welcome to our 2024 Sourcing Report! The hot topic for the year was (and still is) cocoa prices, which have risen significantly. While higher prices pose challenges for chocolate makers, it's great news for cacao growers and processors, who are now receiving greater compensation for their hard work.

Over the last year or so, there's been huge volatility in the commodity-cocoa futures market. In 2023, the average commodity price for cocoa was about $3.25 per kilogram, whereas now it's upward to around $12.50 per kilogram — depending on the day.

At Dandelion, we have operated under a purchasing model based on prices our producing partners believe to be appropriate, independent of the commodity market. Before commodity prices spiked, we were paying more than double the market price — an average of $7.86 per kilogram in 2023. So while the commodity market always fluctuated slightly, it didn't much affect the prices we paid, as they were already far above market rate. That all changed in 2024 when the market price started fluctuating wildly, and our average price increased to $11.03 per kilogram.

Why are prices on the rise? Essentially, it's a case of supply and demand. Demand is growing, while over the last three to four years, supply has been shrinking. Ghana and Côte d'Ivoire, which produce more than 60 percent of the world's cocoa, have experienced lower than normal productivity due to climate change, disease, and older trees, and these issues do not appear to be temporary.

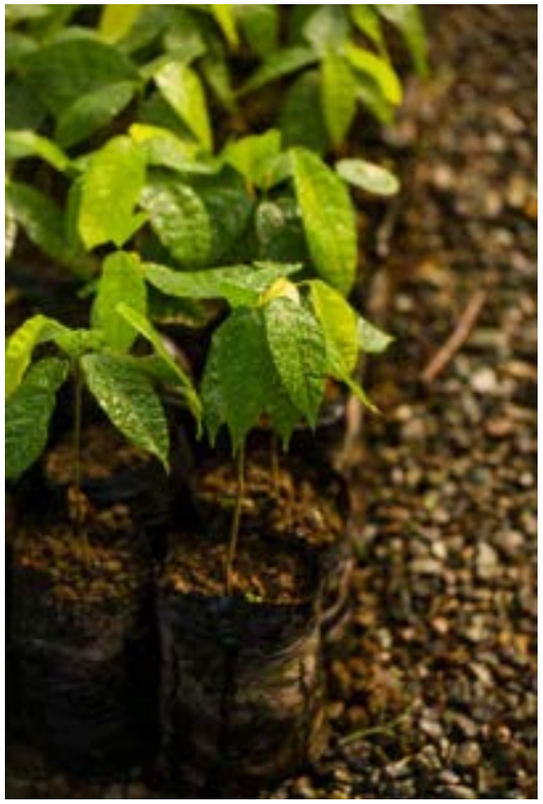
Cocoa is historically a volatile market, in part due to its size relative to higher-volume commodities such as corn and soy. Added to that, a history of emerging markets, political instability, civil unrest, speculators, agro-terrorism, under-investment, and a changing climate have affected the price of cocoa since the 1800s, when Central and South America grew the bulk of the world's supply. By the 1930s, Africa had become the largest supplier. Some African countries formed cocoa boards to control exports and set prices. After World War II, economies boomed, and so did cocoa prices — quintupling what they'd been before.

The price of cocoa last rose in the 1970s due to reduced production in regions like Ghana — which led to increased plantings globally. However, these trees are now 40 to 50 years old, and are losing productivity. As the growth cycle restarts, we anticipate that younger, more vigorous trees will become available in the next few years. This comes at a time when climate change and inflation are affecting the market, right as cocoa prices have been unsustainably low. All factors have contributed to a decrease in cocoa production.

Craft chocolate makers, as a rule, pay higher prices for better-quality cocoa; but if farmers are already getting three or four times what they used to, is there any additional amount of money that will make it worthwhile to do the increased work needed to produce higher-quality beans? Different farmers will feel differently on this point. For example, one of our long-term producer partners, Cahabón, Guatemala's ADIOSEMAC, has opted to sell to the commodity market; while other producers, such as Ebier Suth in Ransiki, Indonesia, are sticking with the specialty market, revitalizing neglected cacao farmland through planting and grafting new trees to meet demand for better cocoa.

The biggest change for chocolate makers and cocoa exporters alike is that cash is very much king. Many of the centralized fermentaries we work with want to maintain their existing profit margins, but now need to spend three or four times what they used to on the same quantities of wet beans, to net the same amount of money. At Dandelion Chocolate, our cocoa has always been one of our largest costs, and that expense has now almost doubled. For a time, craft makers thought we needed to figure out how to weather the storm — but the industry has accepted that this is the new normal, and our systems and prices need to be updated accordingly.

The best thing to come out of the rising market is that many of the cocoa producers we've worked with for years are able to get better prices for their products, which means they are able to reinvest in their farms, pay off loans, and plant new trees. The commodity price for cocoa had been too low for decades. Dandelion, however, has paid premium prices for high-quality cocoa since we began, as we recognize the additional effort required to produce it. Now with commodity prices much higher, we're actively collaborating with our cocoa producing partners to navigate the new landscape.



As always, relationships are at the heart of everything we do. We want to keep partnering with all of the amazing people we've been working with, some for over a decade. We've aimed to maintain consistency and stability for everyone, even during challenging times. We will continue to navigate the complexities of this industry together, and we remain optimistic about the future — one in which market prices stabilize at a higher level.

– Greg & Ron

CADMIUM & LEAD

(A.K.A. HEAVY METAL THUNDER)

Fun fact: Cadmium is a metal found in the Earth's crust; it naturally occurs in the soil as a result of volcanic emissions that have taken place over thousands of years. Trees and plants pull elements and compounds, including cadmium, from the soil into their trunks, leaves, fruits, and seeds. Cadmium can therefore be found in high concentrations in fruits and vegetables — particularly root vegetables, and leafy greens such as spinach and kale. Cereals, rice, nuts, pulses, soybeans, shellfish, organ meats, and other foods also have naturally high concentrations of cadmium.

But wait, what does this have to do with chocolate?

Cadmium and lead became a hot topic at the end of 2022, when a *Consumer Reports* article discussed cadmium and lead in chocolate — so we thought it was worth diving into some detail for the interested reader. There are no U.S. federal regulations or guidelines on dietary exposure to cadmium; the sole U.S. regulation regarding cadmium and lead in chocolate, that we know of, is California's Proposition 65. Prop 65 was created in 1986 as a way to give consumers recourse if businesses exposed them to dangerous compounds. Prop 65 was designed as a *right-to-know law, and not a determinant of safety*.

Hundreds of compounds are listed under Prop 65, and limits for each were set based on the **No Observable Effect Level** (NOEL) — as determined, per the California Office of Environmental Health Hazard Assessment (OEHHA), "... based on the most sensitive study deemed to be of sufficient quality (22 CCR Section 12803(a)(4))." The NOEL level (an amount that would cause no harm) was then divided by 1000.

Alternatively, a study could indicate the **Lowest Observable Effect Level** (LOEL), and that number would be divided by 10, and then divided again by 1000. The resulting micro-quantities are considered a **Maximum Allowable Dose Level** (MADL). To be clear, *the MADL is either **1000 times below** what is found to cause no harm, or **10,000 times lower** than what is shown to cause harm*. Prop 65 does not state that anything beyond the MADL is dangerous — just that anything beyond the MADL requires a warning.

As a side note, while the vast majority of our products are under Prop 65 limits, we provide warning signs at our points of sale, both in person and online, to ensure that our guests are informed, and that we are compliant with California law.

Interestingly, Prop 65 provides an exemption for any compounds that are "naturally occurring" — that is, not potentially resulting from processing, or from metal packaging. This is why there are no warnings printed on foods such as **spring-mix salad** (which contains much higher levels of both cadmium and lead, per serving, than chocolate), or **sunflower seeds** (which have similarly high levels). Since these products are not "manufactured," they fall under the exemption.

Over time, several organizations have tested various products using the Prop 65 guidelines, and based on what they've found, have initiated lawsuits. As You Sow is one such organization that focuses on chocolate. They tested bars from multiple makers, and detected differing levels of cadmium and lead. Their 2018 case against nine manufacturers was brought together in a summary judgment that decided three points:

1. A number of chocolate makers needed to pay settlement money to As You Sow (this is their income stream).

2. As You Sow was required to conduct and publish a study determining where and how cadmium and lead come to exist in chocolate, and whether the two metals are present in cocoa beans.

COVERED PRODUCT	CADMIUM CONCENTRATION	LEAD CONCENTRATION
CHOCOLATE PRODUCTS WITH UP TO 65% COCOA CONTENT	0.40 PPM	0.10 PPM
CHOCOLATE PRODUCTS WITH 65% TO 95% COCOA CONTENT	0.45 PPM	0.15 PPM
CHOCOLATE PRODUCTS WITH GREATER THAN 95% COCOA CONTENT	0.96 PPM	0.225 PPM

3. New, more practical limits were agreed upon for cadmium and lead levels in chocolate. The minimum lead and cadmium concentrations necessitating Prop 65 warnings are shown above, in parts per million (ppm).

As You Sow published their report in August of 2022. Their document outlines that cadmium is naturally occurring, coming into chocolate through the soil in which cacao trees grow; and that lead comes into cocoa beans via environmental exposure.

At Dandelion, we test for both microbiological contaminants and heavy metals in every new delivery of beans: We have a representative lot sample drawn by an independent company and delivered to Anresco Laboratory in San Francisco, for testing. Currently we will reject any beans that test positive for E. coli, salmonella, and / or listeria, and we monitor levels of cadmium, lead, arsenic, and mercury.

Additionally, we test all of our finished chocolate for cadmium and lead to ensure that levels are extremely low, and we compare our results to the levels set by the summary judgment. We've found traces of cadmium in nearly all of our chocolate, though the only bars that have shown levels requiring a Prop 65 warning are our bars made of beans from Ecuador and Honduras. Ecuador tends to have higher soil levels of cadmium than other origins, but as we don't want to abandon the country's cocoa farmers and producers, with whom we've worked for years, we warn consumers of the general risk.

As noted above, lead in cocoa is less well understood than cadmium; it's assumed to come from the environment. None of our bars contains significant levels of lead: Of the 18 bars we tested recently, 16 of them showed no lead at all, and the other three tested only slightly above the detection threshold (around 0.01 ppm), and an order of magnitude *below* the Prop 65 limit of 0.15 ppm (shown above).

We were curious about cadmium and lead levels in other foods, so we tested a wide variety of products from local grocery stores, and cadmium and lead were detected in almost all of them. This was by no means a scientific study, but we wondered how prevalent cadmium and lead are generally, and the answer is that there seem to be low levels of both metals just about everywhere.

We believe it's always a good idea to understand the benefits and potential risks of foods that we eat. In assessing risks that any food might pose, we encourage you to consider your current health, as well as the food's source, and the quantity consumed. According to the Centers for Disease Control, most orally ingested cadmium passes through the gastrointestinal tract unchanged, as most healthy individuals absorb only about 2.5 percent of cadmium ingested in food.

A European Union study on dietary exposure to cadmium found that grains and grain products cause the largest degree of exposure to cadmium (26.9 percent), followed by vegetables and vegetable products (16.0 percent), and starchy roots and tubers (13.2 percent). Chocolate and chocolate products accounted for only 4.3 percent of the dietary exposure to cadmium. It also found that often it's not foods with the highest cadmium levels, but foods consumed in larger quantities, that have the greatest impact on dietary exposure to cadmium.

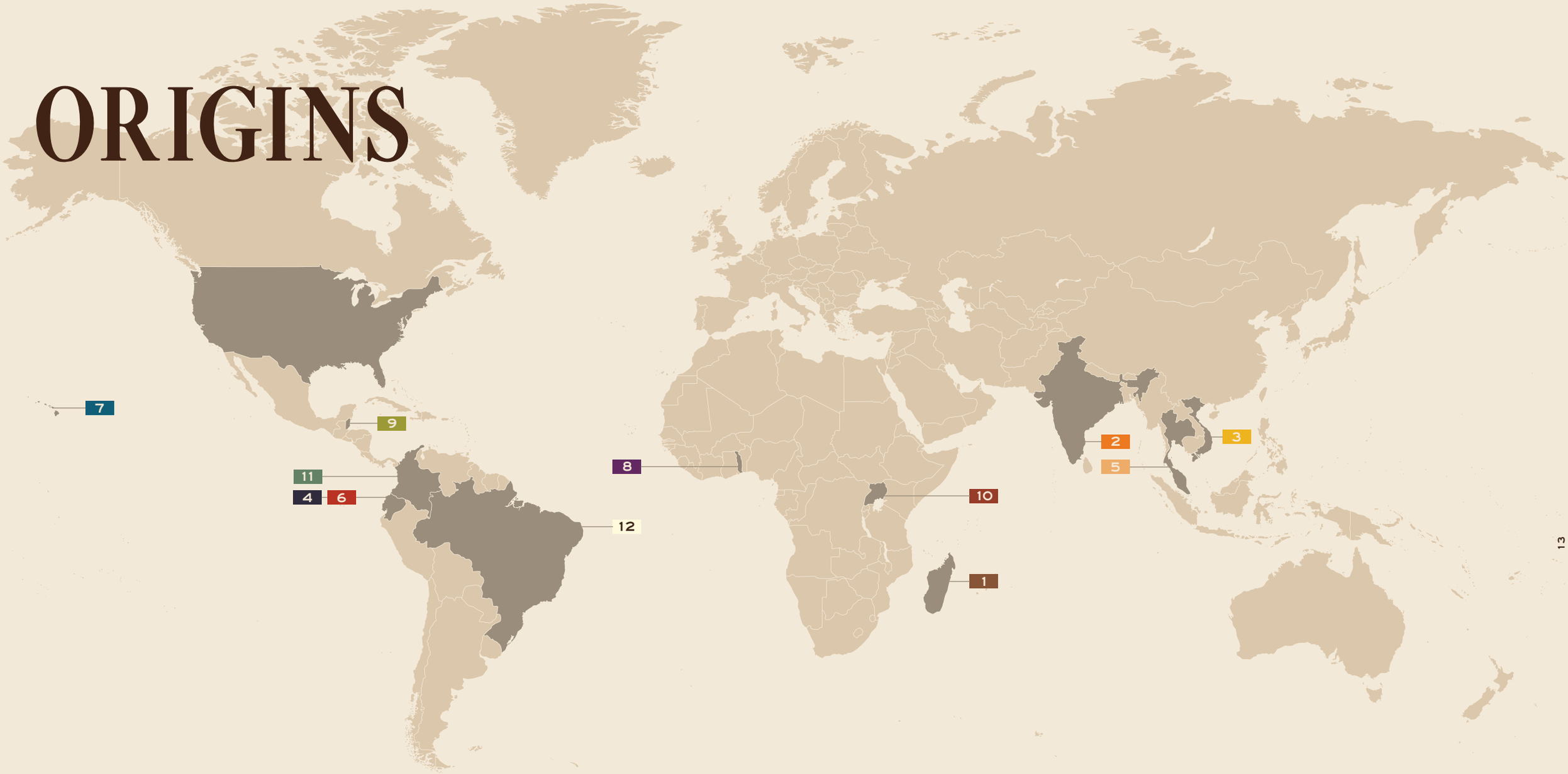
If cadmium is of specific concern, we suggest avoiding our chocolate bars made from Ecuadorian and Honduran cocoa, as chocolate produced from those beans tends to test higher for cadmium than other cocoa origins. When it comes to lead, based on the data, we believe that none of our chocolate is cause for concern.

We hope this information about cadmium and lead in general, as well as cadmium and lead in chocolate, proves useful. The natural world is fascinating and complex, and if you examine one small component, it can seem surprising; we find that the context around cadmium and lead in food has helped us understand our risk factors, and hope you feel the same.

ORIGIN	HARVEST	PERCENTAGE	CADMIUM (PPM)	LEAD (PPM)
AMBANJA, MADAGASCAR	2022	70%	0.173 PPM	NONE DETECTED
ANAMALAI, INDIA	2022	70%	0.053 PPM	NONE DETECTED
CAMINO VERDE, ECUADOR	2023	100%	0.550 PPM	NONE DETECTED
CAMINO VERDE, ECUADOR	2024	70%	0.752 PPM	NONE DETECTED
COSTA ESMERALDAS, ECUADOR	2022	70%	1.195 PPM	NONE DETECTED
COSTA ESMERALDAS, ECUADOR	2022	85%	1.599 PPM	NONE DETECTED
HACIENDA AZUL, COSTA RICA	2022	70%	NONE DETECTED	NONE DETECTED
KPALIMÉ, TOGO	2023	70%	0.043 PPM	NONE DETECTED
KOKOA KAMILI, TANZANIA	2021	70%	0.065 PPM	0.017 PPM
KOKOA KAMILI, TANZANIA	2023	70%	0.085 PPM	NONE DETECTED
MAYA MOUNTAIN, BELIZE	2023	70%	0.423 PPM	NONE DETECTED
MAYA MOUNTAIN, BELIZE	2023	85%	0.377 PPM	NONE DETECTED
RANSIKI, INDONESIA	2023	70%	0.066 PPM	NONE DETECTED
SEMULIKI FOREST, UGANDA	2023	70%	0.340 PPM	NONE DETECTED
TUMACO, COLOMBIA	2023	70%	0.258 PPM	NONE DETECTED
WAMPU, HONDURAS	2023	70%	0.649 PPM	0.038 PPM
ZORZAL COMUNITARIO, D.R.	2022	70%	0.137 PPM	NONE DETECTED
ZORZAL COMUNITARIO, D.R.	2023	70%	0.142 PPM	NONE DETECTED

FOOD	CADMIUM (PPM)	LEAD (PPM)
SPRING-MIX SALAD	0.1 PPM	0.016 PPM
KALE	0.076 PPM	NONE DETECTED
TOMATO	NONE DETECTED	NONE DETECTED
CARROT	0.011 PPM	0.011 PPM
SWEET POTATO	NONE DETECTED	0.015 PPM
ORGANIC BROWN MUSHROOMS	NONE DETECTED	0.013 PPM
EXTRA-FIRM TOFU	0.017 PPM	NONE DETECTED
SUNFLOWER SEEDS	0.305 PPM	0.042 PPM
EXTRA-LONG-GRAIN WHITE RICE	0.015 PPM	0.014 PPM
ORGANIC BROWN JASMINE RICE	NONE DETECTED	0.015 PPM
STEEL-CUT INSTANT OATMEAL	0.054 PPM	0.011 PPM
FAST-FOOD FRIES	0.073 PPM	NONE DETECTED

ORIGINS



	ORIGIN & COUNTRY	REGION	SOURCE
01	AMBANJA, MADAGASCAR	SAMBIRANO VALLEY	BEJOFO ESTATE
02	ANAMALAI, INDIA	ANAMALAI	REGAL PLANTATIONS
03	BẾN TRE, VIETNAM	BẾN TRE	MAROU
04	CAMINO VERDE, ECUADOR	GUAYAS	CAMINO VERDE
05	CHANTHABURI, THAILAND	CHANTHABURI	THAI CACAO DISTRIBUTION
06	COSTA ESMERALDAS, ECUADOR	ATACAMES	COSTA ESMERALDAS
07	HAWAI'I, U.S.A.	O'AHU	MĀPELE FIELDS
08	KPALIMÉ, TOGO	PLATEAUX REGION	GEBANA
09	MAYA MOUNTAIN, BELIZE	TOLEDO	MAYA MOUNTAIN CACAO, LTD.
10	SEMULIKI FOREST, UGANDA	SEMULIKI	LATTITUDE TRADE COMPANY
11	TUMACO, COLOMBIA	NARIÑO	CACAO HUNTERS
12	VALE POTUMUJÚ, BRAZIL	BAHIA	PRIME CACAO

YEARS PURCHASED	LAST VISIT DATE	LAST VISIT GROUP	ROAST PROFILE BY
2012–2024	11.2015	GREG	NILESH
2017–2024	01.2024	RON	TREVOR
2018–2024	09.2019	GREG, RICHARD, BECCA, CYNTHIA, MARY, YUKI	RICHARD (U.S.A.) | YURI (JAPAN)
2013–2024	08.2018	GREG, KAREN, RICHARD, MEGAN	ERIC
2024	01.2024	GREG	TBD
2016–2024	08.2018	GREG, KAREN, RICHARD, MEGAN	ERIC
2024	10.2024	GREG	TBD
2023–2024	UPCOMING	N/A	PABLO
2013–2024	09.2023	RON	TREVOR (U.S.A.) | YURI (JAPAN)
2022–2024	11.2023	GREG	TREVOR
2017–2024	04.2024	RON	PABLO
2019–2024	12.2024	GREG	TBD

THE NUMBERS

As the goal of this report is to provide as much information as possible, we believe the easiest way to do that is to list every shipment we receive. We hope this will give you insight into how the cocoa logistics of a company such as ours work.

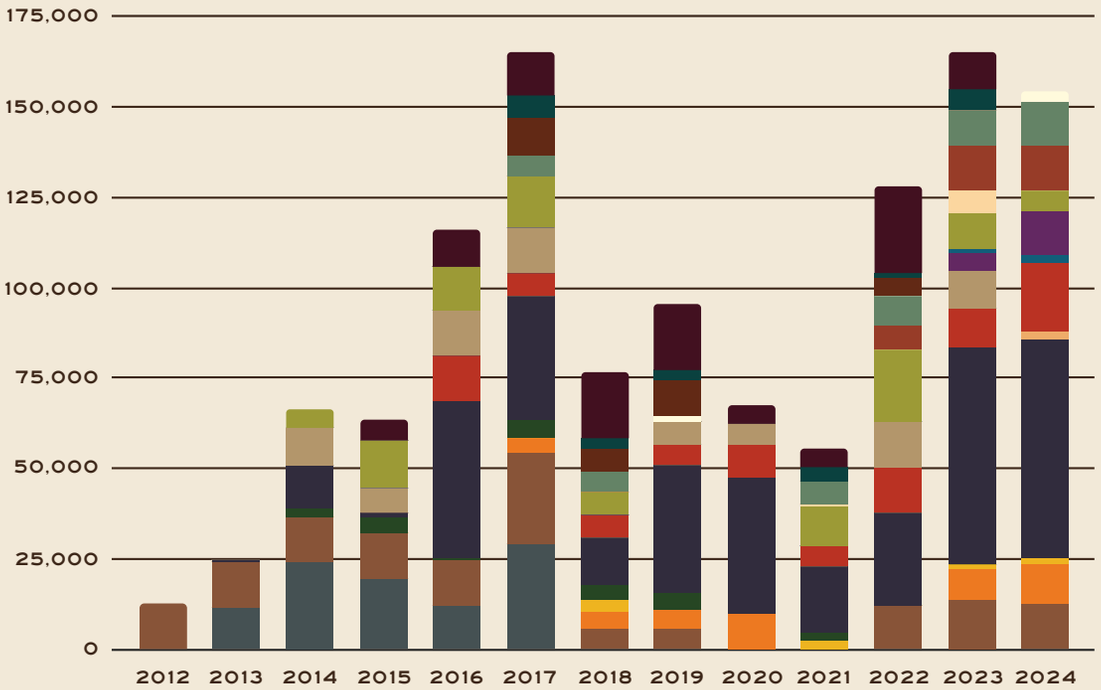
2024

DATE PURCHASED	ORIGIN	TOTAL WEIGHT (KG)	TOTAL	PRICE (KG)
JAN 2024	COSTA ESMERALDAS, ECUADOR	3,468	$29,762.38	$8.58
JAN 2024	COSTA ESMERALDAS, ECUADOR	15,368	$131,165.88	$8.54
FEB 2024	CHANTHABURI, THAILAND	2,000	$18,200.00	$9.10
MAR 2024	CAMINO VERDE, ECUADOR	20,010	$240,560.22	$12.02
APR 2024	BẾN TRE, VIETNAM	2,000	$22,154.00	$11.08
APR 2024	ANAMALAI, INDIA	10,035	$96,897.96	$9.66
APR 2024	ANAMALAI, INDIA (NUTMEG)	405	$4,484.16	$11.07
APR 2024	TUMACO, COLOMBIA	12,000	$119,916.00	$9.99
MAY 2024	SEMULIKI FOREST, UGANDA	12,500	$95,150.00	$7.61
MAY 2024	KPALIMÉ, TOGO	12, 000	$109,368.00	$9.11
JUN 2024	CAMINO VERDE, ECUADOR	20,217	$244,807.65	$12.11
JUN 2024	AMBANJA, MADAGASCAR	13,000	$144,495.00	$11.12
AUG 2024	HAWAI'I, U.S.A.	2,043	$67,500.72	$33.04
SEP 2024	MAYA MOUNTAIN, BELIZE	6,050	$62,859.50	$10.39
DEC 2024	VALE POTUMUJÚ, BRAZIL	2,500	$32,230.00	$12.89
DEC 2024	CAMINO VERDE, ECUADOR	20,355	$277,845.75	$13.65
2024 TOTAL		153,951 KG	$1,697,397.22	

2024 AVERAGE PER KG $11.03

ANNUAL QUANTITY PURCHASED

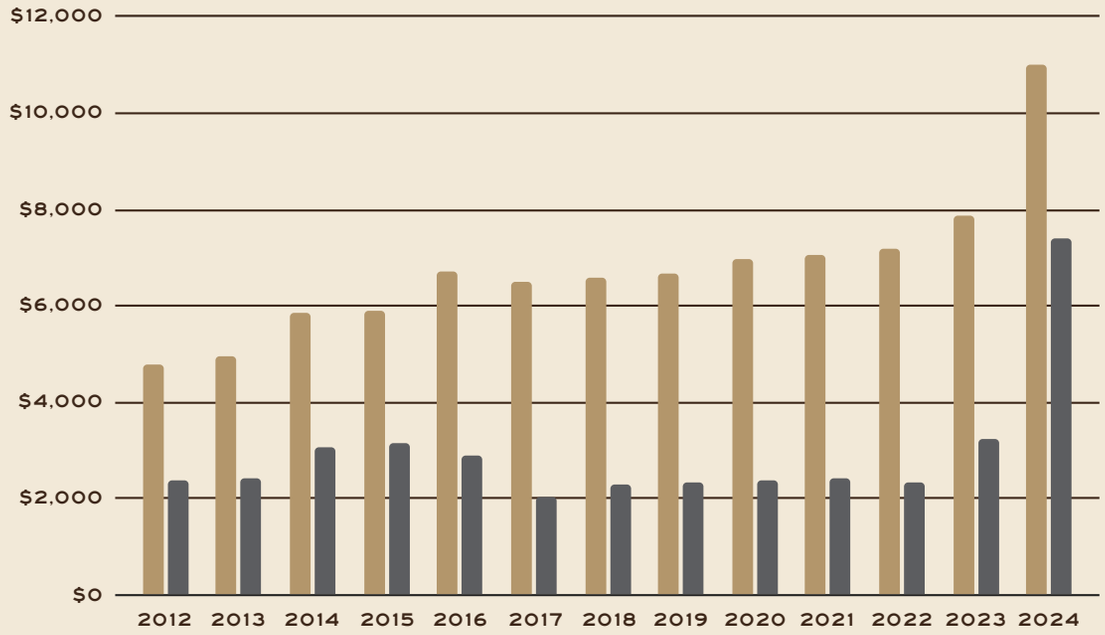
Now that we have been purchasing cocoa for over a decade, our data are interesting in aggregate. This graph shows all substantial purchases we've made; origins that we no longer use are lumped together, while current origins are broken out per year.



Ambanja, Madagascar
Anamalai, India
Bến Tre, Vietnam
Cahabón, Guatemala
Camino Verde, Ecuador
Chanthaburi, Thailand
Costa Esmeraldas, Ecuador
Hacienda Azul, Costa Rica
Hawai'i, USA
Kokoa Kamili, Tanzania
Kpalimé, Togo
Maya Mountain, Belize
Ransiki, Indonesia
Semuliki Forest, Uganda
Tumaco, Colombia
Vale Potumujú, Brazil
Wampu, Honduras
Zorzal, Dominican Republic
Discontinued Origins

AVERAGE PRICE PER TONNE

Price isn't everything, but we believe it is only fair to pay an appropriate amount for cocoa. Unless you work in cocoa, you might not follow market trends, but we thought it would be interesting to show the ups and downs of the average commodity price versus the average price we pay.



Average Dandelion Chocolate Price
Average World Price

	Fermentation	*Drying*	*Logistics*			
AMBANJA MADAGASCAR	4-TIERED BOXES	RAISED WOODEN BEDS & CEMENT PATIOS	AKESSON'S ORGANIC ESTATE GROWS, FERMENTS, DRIES, & BLENDS BEANS		EXPORT BY AKESSON'S ORGANIC ESTATE	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE
ANAMALAI INDIA	5-TIERED BOXES	RAISED MESH BEDS & CEMENT PATIOS	REGAL PLANTATIONS GROWS BEANS & BUYS PODS FROM SMALLHOLDER FARMERS	REGAL PLANTATIONS FERMENTS, DRIES, & BLENDS BEANS	EXPORT BY REGAL PLANTATIONS	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE
BẾN TRE VIETNAM	LINEAR BOXES	RAISED MESH BEDS	SMALLHOLDER FARMERS GROW BEANS	TWO LOCAL FERMENTERS BUY, FERMENT, & DRY BEANS	MAROU BLENDS BEANS	EXPORT BY MAROU	IMPORT BY MERIDIAN CACAO
CAMINO VERDE ECUADOR	LINEAR BOXES	CEMENT PATIOS	SMALLHOLDER FARMERS GROW BEANS	CAMINO VERDE BUYS, FERMENTS, DRIES, & BLENDS BEANS	EXPORT BY CAMINO VERDE	IMPORT BY MERIDIAN CACAO
CHANTHABURI THAILAND	LINEAR BOXES	RAISED MESH BEDS	SMALLHOLDER FARMERS GROW BEANS	THAI CACAO DISTRIBUTION BUYS PODS	SURIYA COCOA FERMENTS, DRIES, & BLENDS BEANS	EXPORT BY THAI CACAO DISTRIBUTION	IMPORT BY UNCOMMON CACAO
COSTA ESMERALDAS ECUADOR	5-TIERED BOXES	RAISED MESH BEDS & CEMENT PATIOS WITH GREENHOUSE	COSTA ESMERALDAS GROWS, FERMENTS, DRIES, & BLENDS BEANS		EXPORT BY COSTA ESMERALDAS	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

	Fermentation	Drying	Logistics			
HAWAI'I U.S.A.	LINEAR BOXES	RAISED MESH BEDS & CEMENT PATIOS WITH GREENHOUSE	SMALLHOLDER FARMERS & MĀPELE FIELDS GROW BEANS	MĀPELE FIELDS BUYS, FERMENTS, DRIES, & BLENDS BEANS	EXPORT BY MĀPELE FIELDS	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE
KPALIMÉ TOGO	HEAP FERMENTATION WITH BANANA & PLANTAIN LEAVES	RAISED BAMBOO BEDS	SMALLHOLDER FARMERS GROW, FERMENT, & DRY BEANS	VISON+ CO-OP BUYS & BLENDS BEANS	EXPORT BY GEBANA	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE
MAYA MOUNTAIN BELIZE	LINEAR BOXES	RAISED WOODEN BEDS & CEMENT PATIO WITH GREENHOUSE	SMALLHOLDER FARMERS GROW BEANS	MAYA MOUNTAIN CACAO BUYS, FERMENTS, DRIES, & BLENDS BEANS	EXPORT BY MAYA MOUNTAIN CACAO	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE
SEMULIKI FOREST UGANDA	LINEAR BOXES	RAISED WOODEN BEDS & CEMENT PATIO WITH GREENHOUSE	SMALLHOLDER FARMERS GROW BEANS	LATTITUDE TRADE CO. BUYS, FERMENTS, DRIES, & BLENDS BEANS	EXPORT BY LATITUDE TRADE CO.	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE
TUMACO COLOMBIA	LINEAR BOXES	RAISED WOODEN BEDS WITH GREENHOUSE	SMALLHOLDER FARMERS GROW BEANS	MULTIPLE CO-OPS BUY, FERMENT, & DRY BEANS	CACAO HUNTERS BLENDS BEANS	EXPORT BY CACAO HUNTERS	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE
VALE POTUMUJÚ, BRAZIL	LINEAR BOXES	RAISED WOODEN BEDS WITH GREENHOUSE	PRIME CACAO GROWS, FERMENTS, DRIES, & BLENDS BEANS		EXPORT BY PRIME CACAO	IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

AMBANJA, MADAGASCAR

In 2012, Dandelion Chocolate purchased our first full container of beans — from Bertil Akesson's Bejofo Estate, which has been growing cacao in Ambanja, Madagascar since 1920. We've bought from them consistently ever since, and for the first time in 2017, purchased two full containers (around 25 tonnes) of Bejofo Estate beans.

Akesson's 600-hectare estate, where cacao trees up to 80 years old flourish, is the largest single estate with which we work. Bertil's operation is smooth and consistent. Every morning during harvest season, farm workers cut down about 400 ripe pods each, crack them open, and move the juicy pulp-coated beans quickly into fermentation boxes, where the beans ferment for six days. Fermenting beans immediately after harvest is a crucial piece of quality control, and Bertil ensures that it happens within hours. Once fermented, the beans dry briefly in full sun on cement patios before being moved to elevated drying decks to finish drying slowly. While it's hard to know for certain, we believe this two-part drying process is partially responsible for the beans' flavor.

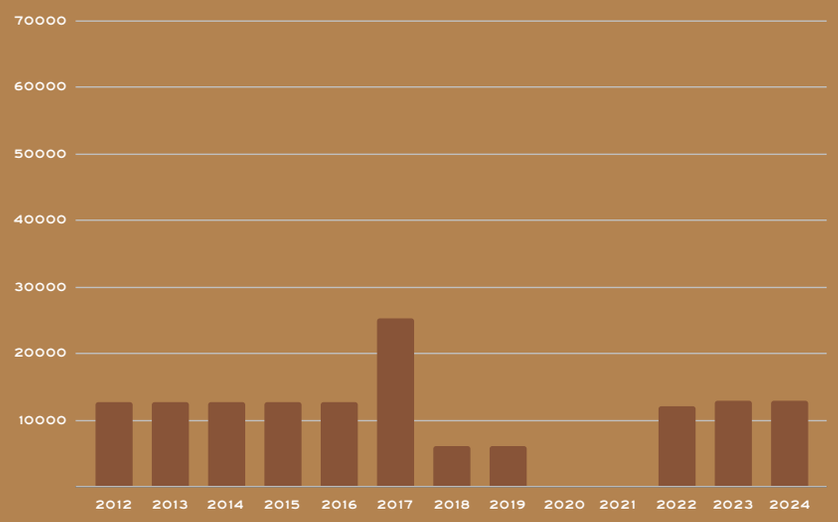
Climate change has become a huge challenge for the team in Madagascar. Over the last decade they've seen peak season move from September through November, to October through January. Additionally, rain patterns are shifting — less rain from July through September, and more rain December through February. This can affect cacao yields, as less rainfall while the trees are developing flowers and pods will usually result in less cacao. Conversely, more rain can oversaturate the soil, causing cacao-protective shade trees to fall.

We are proud to work with Bertil both because we love his beans, and because we believe that he has paved the way for much of specialty cocoa's development. The flavors in his beans change slightly every year, but always include bright fruit and punchy acidity. The bars we create from Bertil's cocoa are among our customers' favorites; they taste nothing like what most Americans think of as "chocolatey." When Bertil started producing beans, most makers were seeking something that tasted like, well, chocolate. Bertil broke the mold and produced cocoa that was intriguing, fruity, and intensely different. Many new chocolate makers now use these beans because they invariably yield distinctive, attention-grabbing bars.

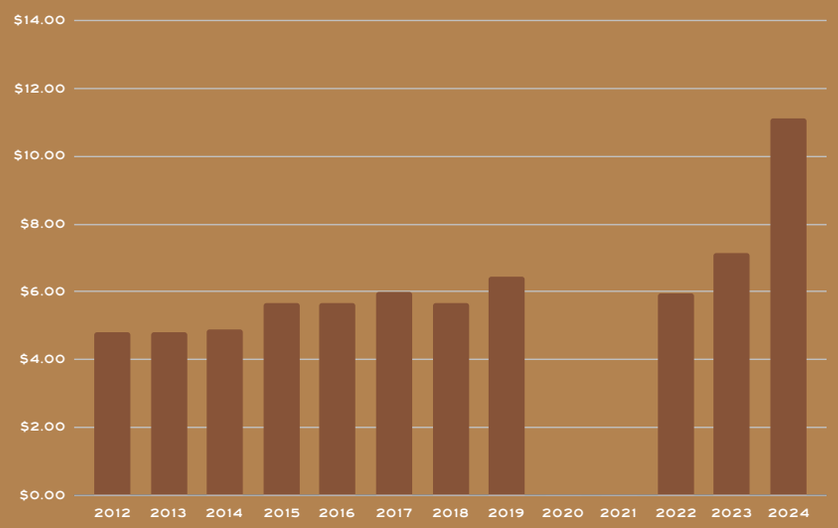
Once cocoa producers saw that there was a market for uniquely flavored cocoa, the floodgates opened and producers started creating new and interesting flavors. Bertil was the first to take this risk. We look forward to continuing our relationship with Bertil, and to making some of our most interesting chocolate from his beans. He has begun a variety of projects in countries beyond Madagascar, and we are eager to see what the future holds for Bertil and his impact on the cocoa industry.

AMBANJA, MADAGASCAR

Quantity Purchased (in Kilograms)



Average Price per Kilogram



13°39'27.8"S 48°28'02.2"E

FERMENTATION STYLE | 4-TIER BOXES

DRYING STYLE | RAISED WOODEN BEDS, CEMENT PATIOS

PROFILE BY | NILESH

FLAVOR PROFILE | FRUIT, DAIRY, BREAD, ROASTED

AKESSON'S ORGANIC ESTATE GROWS, FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY AKESSON'S ORGANIC ESTATE

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

8.4%


TOMETAL
7 AMBANJA

ANAMALAI, INDIA

In 2017, Dandelion Chocolate made our first bar with beans from Asia. The beans were grown in Tamil Nadu, one of India's two southernmost states, an area known more for tigers than cacao.

This cocoa is produced by brothers-in-law Harish Manoj Kumar and Karthikeyan (Karthi) Palanisamy of Regal Plantations, just outside the settlement of Anamalai. Harish is originally from Pollachi, near Regal Plantations, and for many years his family has run multiple farms around Pollachi, focusing on cacao, coconut, and nutmeg. In 2014, Harish took over running the family farms, and partnered with Karthi to improve the quality and flavor of the cacao growing between 30-year-old coconut palms. The brothers-in-law employ around 100 people, 60 of whom are women, and the size and diversity of farms allow Harish and Karthi to experiment with various methods to improve agricultural quality.

The team has focused on creating a sustainable cultivation system on the farms, gradually reducing chemical use until phasing it out completely in 2017. Harish and Karthi subsequently began implementing the Korean natural farming method to enrich the soil with indigenous microorganisms. The method involves constant experimentation and adaptation, relying on understory and overstory crops; as well as on livestock to help manage weeds and fertilize trees. It's easy to see this system's success in the increasingly robust health of Regal Plantations' trees over the years; the difference is incredible.

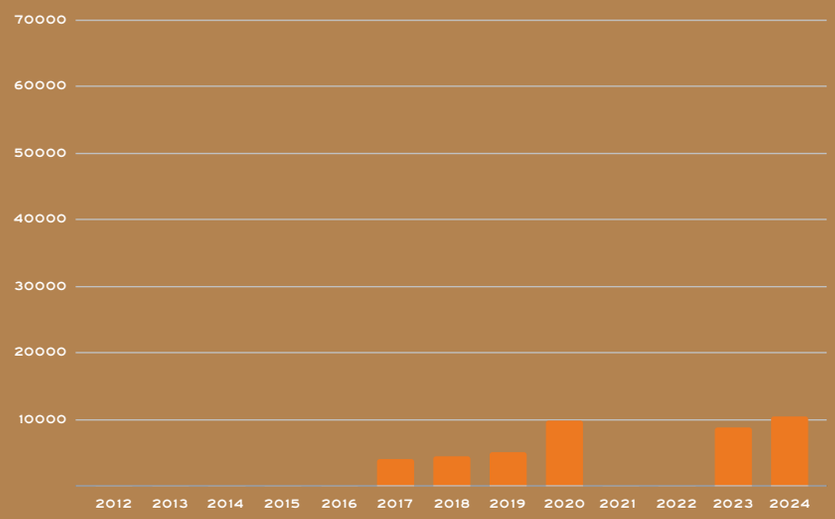
Greg was introduced to Harish and Karthi in 2015 by Meridian Cacao's Gino Dalla Gasperina, whom he had met at Chocoa, a cocoa and chocolate festival in Amsterdam. Greg and Gino decided to stop by Regal Estates "en route" to Tanzania. Greg was blown away by the operation's high level of attention to farming detail, but noted that the fermentation process still needed improvements.

After the initial 2015 visit, Dandelion Chocolate and Meridian Cacao teamed up in supporting Dan O'Doherty, a fermentation expert with Cacao Services, to travel to Regal Plantations in June 2016 to help the Regal team fine-tune their fermentation process. Based on feedback from Dan, Harish and Karthi decided to move their fermentation and drying facilities to a nearby area with better conditions; to build completely new structures; and to retrain their staff on fermentation and drying practices. Fortunately for all involved, the changes worked wonders. When Greg visited in 2017, improvement was clear. The new agricultural systems had increased the trees' productivity remarkably, and the updated fermentation process expressed itself in the beans' new and intense flavor.

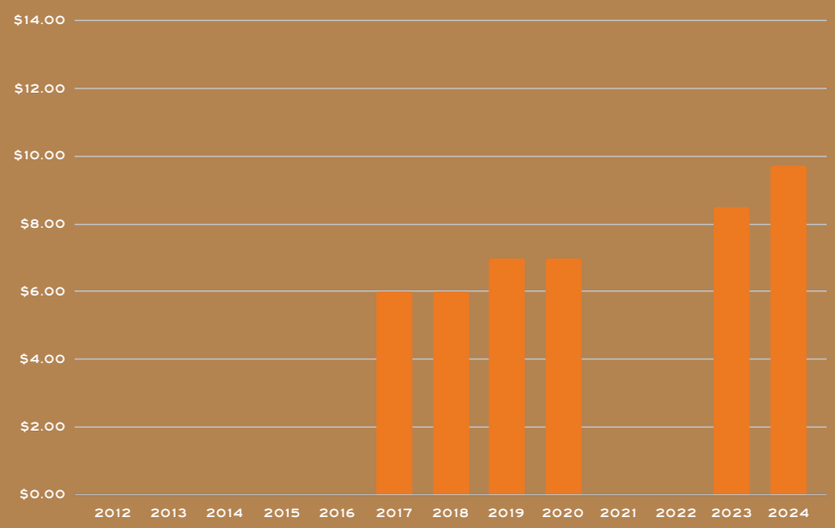
Harish's and Karthi's hard work brought international acclaim when their beans won a Cacao of Excellence Award in 2017. Being the innovative team they are, they even used nutmeg produced on their land in a 2019 spice-fermentation experiment, resulting in some exceptionally tasty beans that we turned into our first-ever Nutmeg Ferment bar! We love using Regal Plantations' beans in both the U.S. and Japan, and look forward to seeing how their product evolves.

ANAMALAI, INDIA

Quantity Purchased (in Kilograms)



Average Price per Kilogram



10°39'18.2"N 77°01'45.4"E

FERMENTATION STYLE | 5-TIER BOXES

DRYING STYLE | RAISED MESH BEDS, CEMENT PATIOS

PROFILE BY | TREVOR

FLAVOR PROFILE | FRUIT, HERBACEOUS, DAIRY

REGAL PLANTATIONS GROWS BEANS & BUYS PODS FROM SMALLHOLDER FARMERS

REGAL PLANTATIONS FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY REGAL PLANTATIONS

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

6.7%

ANAMALAI, INDIA

BẾN TRE, VIETNAM

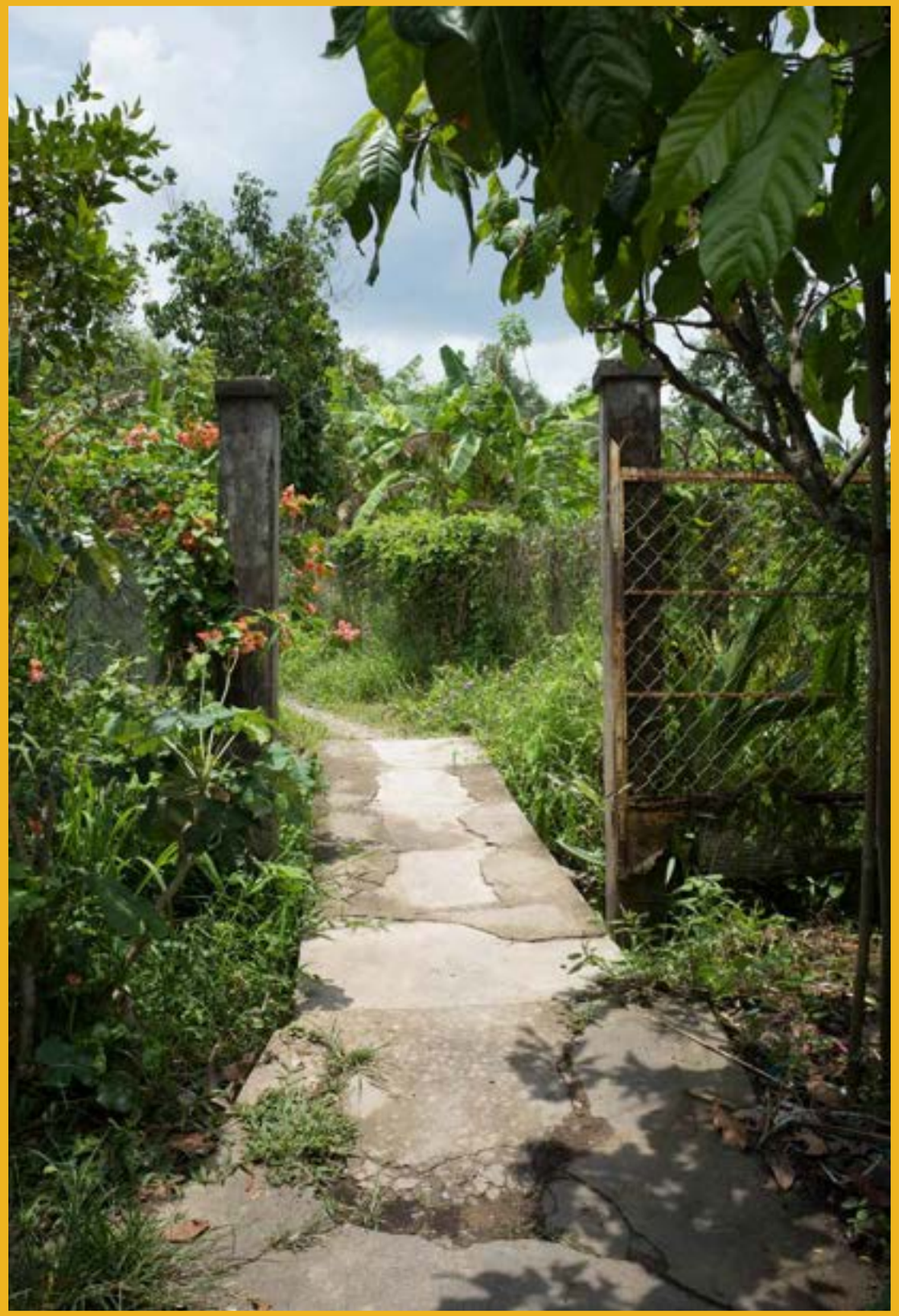
You might know Marou Faiseurs du Chocolat (Marou), more as a chocolate brand than a cocoa supplier. We also first got to know them through their tasty chocolate and beautiful packaging. Marou launched their business in 2011, just a year after Dandelion Chocolate, and we've been consistently impressed by their products since. While we've focused on making two-ingredient, single-origin chocolate using cocoa sourced from many countries, Marou has concentrated on making chocolate products in Vietnam, from Vietnamese ingredients. They have built relationships and provided support to a network of cocoa producers throughout Vietnam, and in turn produce chocolate from each small, unique origin.

In 2019, Greg and a portion of the Dandelion Chocolate U.S. and Japan teams visited Marou to learn more about the company and the producers with whom they work. Our team members were able to visit a number of producers, as well as the Marou factory and both Maison Marou café / patisserie locations. It was fascinating to see the parallel between Dandelion and Marou.

As Dandelion and Marou emerged over the same time, making similar products, it felt natural to us both that we should work together. We love Marou's chocolate and hoped to procure some of the same beans, thereby increasing the quantity of beans purchased from Vietnamese producers at premium price. The question was which producer could supply enough beans for both Marou and another company like us. We didn't need an enormous quantity compared to the amount we source from other origins. (To date, our smallest origins typically sell us approximately one to three tonnes of beans; but even three tonnes is a lot for a small group to produce.)

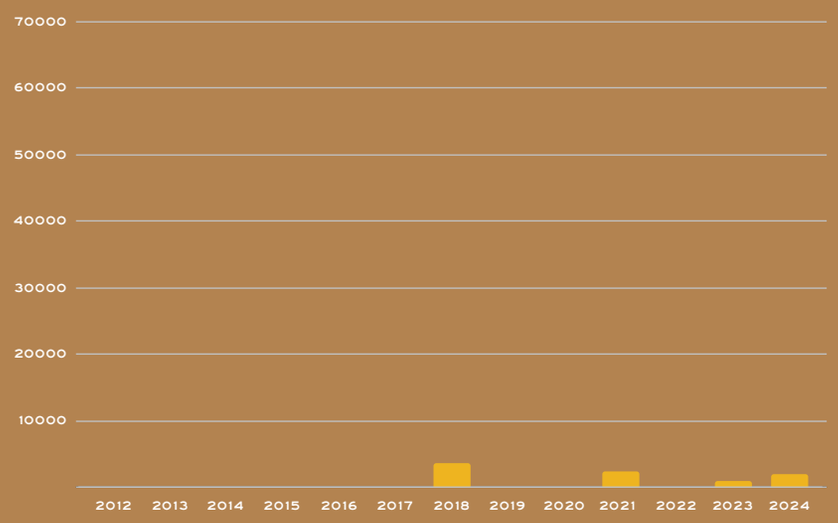
At Marou's suggestion, we decided to work with Bến Tre, located in southern Vietnam along the Mekong Delta. In part, this was because we love the flavors in the Bến Tre bar that Marou makes — and also because Marou felt confident that the producers could reliably supply enough beans for both of us. The beans we source are produced by two small fermenters, Mr. Son and Ms. Ban. Marou has been working with them for many years. Each fermenter buys cacao pods from their neighbors, purchasing from around 60 small farmers in total. They ferment the beans in linear boxes and dry them on elevated mesh decks. The Marou team inspects and purchases the best beans, and then blends them for consistency. This last step is a key factor for beans we use at Dandelion, as it helps ensure we can keep flavor consistent within a single harvest of beans.

If you'd like to learn more about Marou or Bến Tre, Marou's website contains a sourcing report which provides additional information. There are numerous links in the value chain that brings Bến Tre beans from Vietnam to San Francisco (and then sends a portion on to Tokyo), and we are honored to work with each and every person involved. Marou and Dandelion continue to grow: We've opened new shops, created new products, and worked with new origins, and the two teams purchase similar quantities of cocoa. We look forward to what the future holds for both companies..

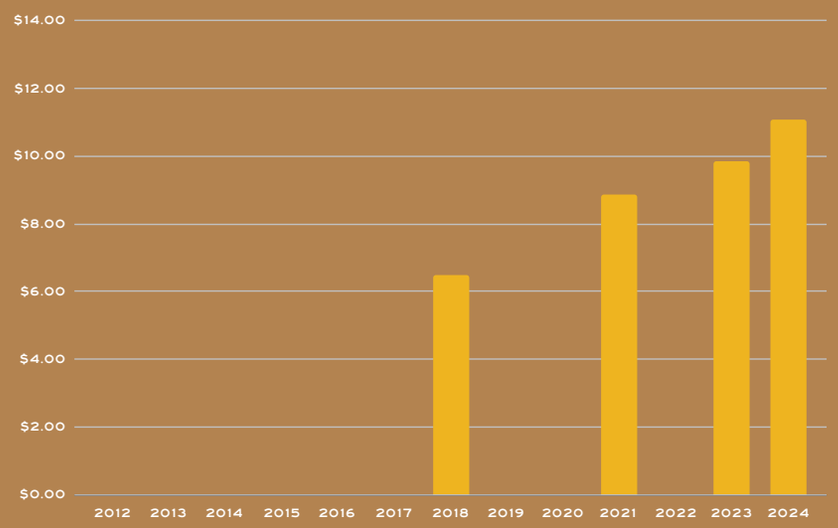


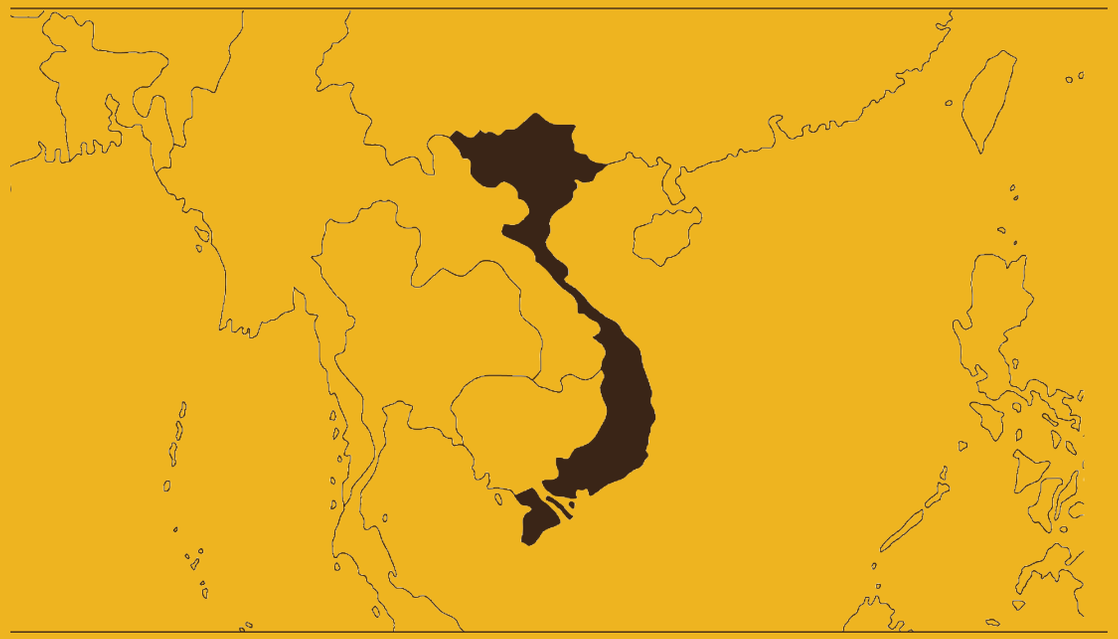
BẾN TRE, VIETNAM

Quantity Purchased (in Kilograms)



Average Price per Kilogram





10°18'17.4"N 106°14'16.5"E

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED MESH BEDS

PROFILE BY | RICHARD (U.S.A.) & YUKI (JAPAN)

FLAVOR PROFILE | SWEET AROMATIC, SPICE, FRUIT

SMALLHOLDER FARMERS GROW BEANS

TWO LOCAL FERMENTERS BUY, FERMENT, & DRY BEANS

MAROU BLENDS BEANS

EXPORT BY MAROU

IMPORT BY MERIDIAN CACAO

Percentage of total beans purchased from all producers over 2024

1.2%

BẾN TRE, VIETNAM

CAMINO VERDE, ECUADOR

Vicente Norero, the owner and general manager of Camino Verde Cacao, is one of the most innovative cocoa producers we know. We love the flavor of his beans so much that not only do we make them into two chocolate bars — an 85% and a 100% — but we also turn them into ground 70% chocolate, which we use in nearly all of our U.S. café drinks, and many pastries.

Camino Verde's base of operations is in Duran (near Guayaquil), where Vicente ferments and dries beans, and runs a full chocolate factory which co-manufactures chocolate for multiple makers. Making chocolate in his own factory means that Vicente has the capacity to develop specific flavor profiles for different customers, tailoring his process and getting instant, direct feedback about how various cocoas taste as chocolate. He buys freshly harvested, unfermented beans from over 100 farmers and associations around Ecuador, searching out beans that represent the uniqueness of Ecuadorian cacao. Working successfully with beans from all over the country means continually learning new aspects of fermentation. For instance, cacao grown at high altitude may not ferment the same way as cacao grown at sea level. Every set of beans from each part of Ecuador requires time and experimentation to learn how it is best fermented.

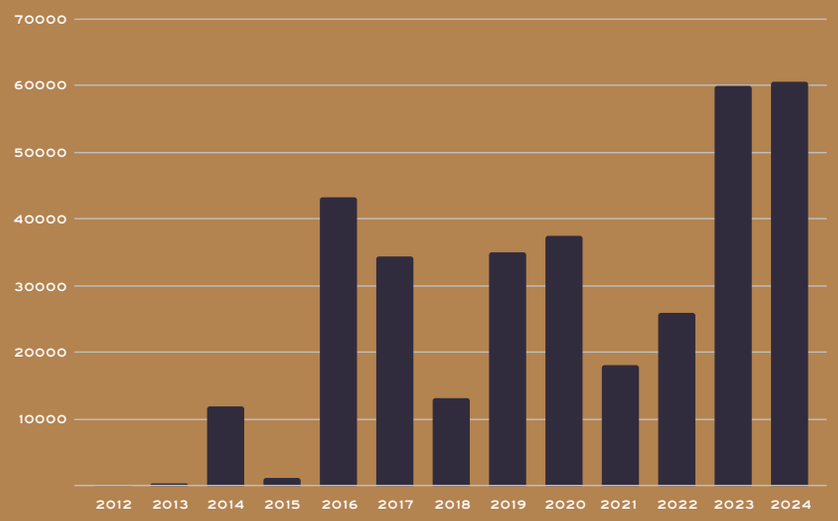
In 2024, Camino Verde received the Food Safety System Certification (FSSC), which includes new regulations for environmental protection, supply chain traceability, and food defense. As a result, Camino Verde's entire supply chain, from wet beans to export, meets international standards for worker respect, and bean safety and quality, as well as fauna and flora protection. Additionally, Camino Verde partnered with a cacao farm within their network to develop a solar-powered "intelligent" farm, which uses Intelligent Automation (IA) codes for bean-lot traceability. This successful project covers 40 hectares of new Nacional clones in the coastal Santa Elena Province, and is the first step toward creating a network of cleaner, more sustainable cacao farms. In the future, Camino Verde hopes to bring more farms online.

In addition to focusing on unique, high-quality cocoa, Camino Verde works with marginalized groups in Los Ríos, central Ecuador; and in Esmeraldas, up north, to improve their crops — and, as a consequence, their livelihoods. Camino Verde has opened dedicated bean-collection points near distant farms, and built the infrastructure needed to ferment beans locally before shipping them to Duran.

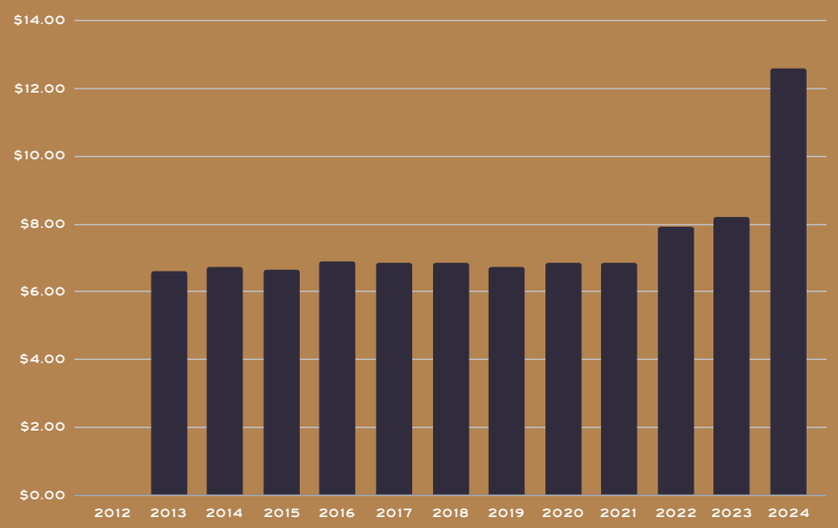
We have worked with Vicente for many years, and are delighted to witness the growth of his operation. We are deeply impressed by his dedication to the pursuit of flavor, as well as by his efforts to boost farmers' incomes. Dandelion Chocolate has purchased more beans from Camino Verde than from any other single producer, and we couldn't be happier with that decision.

CAMINO VERDE, ECUADOR

Quantity Purchased (in Kilograms)



Average Price per Kilogram



2°12'23.7"S 79°48'24.4"W

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | CEMENT PATIOS

PROFILE BY | ERIC

FLAVOR PROFILE | CHOCOLATE, SWEET AROMATIC, NUT

SMALLHOLDER FARMERS GROW BEANS

CAMINO VERDE BUYS, FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY CAMINO VERDE

IMPORT BY MERIDIAN CACAO

Percentage of total beans purchased from all producers over 2024

39.3%

CAMINO VERDE, ECUADOR

CHANTHABURI, THAILAND

We have known Ryan Berk for many years, first meeting at Maya Mountain, Belize in 2013, and since then traveling with him to a wide variety of cacao locations. Now living in Redlands, California, Ryan has built multiple diverse businesses ranging from liquid-nitrogen ice cream, to Parliament Chocolate, and most recently the restaurant Aroi Mak Mak. For Ryan, Thailand has been his second home since he was 14 years old. He long wanted to merge his love of that country with chocolate, and in 2016 he worked with some old friends in Thailand to build a team that has put Thai cocoa on the craft-chocolate map: Thai Cacao Distribution.

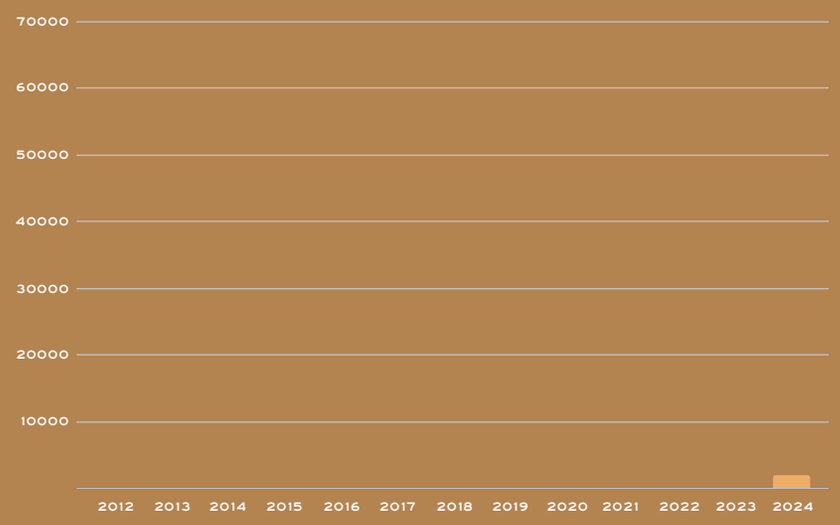
In 2024, Greg visited Ryan's operation near the town of Chanthaburi, in an agricultural region of eastern Thailand where the main cash crops are durian, mangosteen, and rubber trees. The well-established cash crops create an ideal agroforestry system for cacao trees to thrive in; without having to clear new terrain, farmers are able to plant cacao amongst the shade of their existing crops. Cacao is relatively new to Thailand, and it has been adopted by a number of farmers as a way to diversify from the fresh fruits historically grown there.

Thai Cacao Distribution buys freshly harvested cacao pods from a network of 40 growers in the Chanthaburi region, then centrally ferments and dries the beans at family-run fermentation and drying stations, the largest of which are Suriya Farm and Boom Farm. Every 15 days, Thai Cacao visits five gathering stations to purchase cacao pods from the producer network. Globally, most cacao farmers ferment and dry their own beans, and some specialty cacao farmers will sell wet beans; but in Thailand the farmers sell whole cacao pods. Market structure for buying whole pods is driven by farmers' cultural practices around selling other fruits — especially durian, which is the primary crop produced in the region. Whole-pod purchasing is complex, but it helps raise overall quality of the final product, because buyers know the age and ripeness of pods.

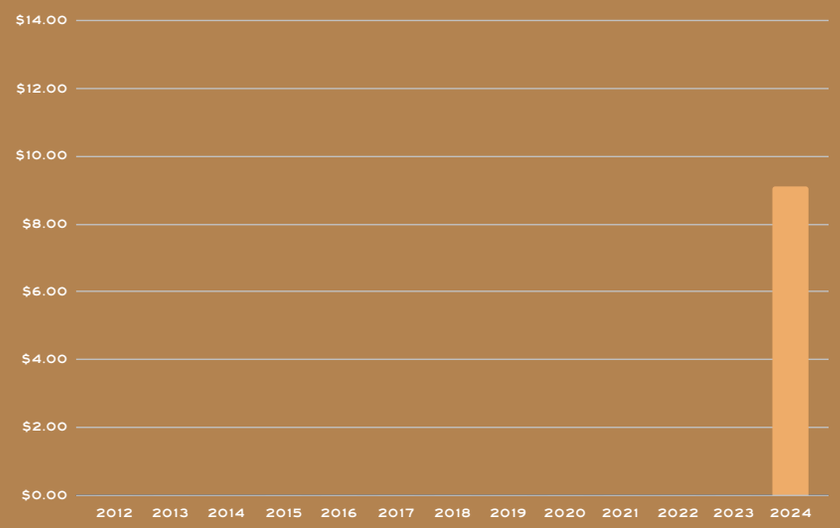
Over the last nine years, Ryan and his expanding team have developed the largest cocoa-export operation in Thailand, with customers spread across the U.S. and Europe. They have developed a precise process to ensure that cocoa quality remains high as their volumes grow. Their beans, produced as a result of ideal growing conditions combined with exceptional post-harvest management, have an amazing, punchy fruit flavor that we hope soon to craft into even more amazing chocolate.

CHANTHABURI, THAILAND

Quantity Purchased (in Kilograms)



Average Price per Kilogram



12°31'29.4"N 102°15'02.1"E

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED MESH BEDS

PROFILE BY | TBD

FLAVOR PROFILE | FRUIT, SWEET AROMATIC, SPICE

SMALLHOLDER FARMERS GROW BEANS

THAI CACAO DISTRIBUTION BUYS PODS

SURIYA COCOA FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY THAI CACAO DISTRIBUTION

IMPORT BY UNCOMMON CACAO

Percentage of total beans purchased from all producers over 2024

1.2%

CHANTHABURI, THAILAND

COSTA ESMERALDAS, ECUADOR

Costa Esmeraldas' Freddy Salazar produces fascinating and unique cocoa that we make into one of our favorite bars. Nearly 15 years ago, Freddy's father purchased two properties on the northeastern side of the beautiful Esmeraldas coast. The properties were covered by dry pastureland, a eucalyptus farm, and wild forest inaccessible by road — and were not ideal for growing cacao. Undeterred, father and son set out to construct a farm and a cocoa-processing facility.

What began as a passion project for the Salazar family has evolved into a thriving farm of over 340 hectares, 200 of which are used for growing cacao. While most of the trees, and the beans we buy, are Neo-Nacional, the farm also produces CCN-51 pods as a cash crop, selling to the local bulk-cocoa market. In addition, the farm produces bananas and citrus, and 50 hectares of land have been preserved as virgin forest, providing a thriving habitat for flora and fauna.

Freddy's Neo-Nacional trees, crossbred from the original Ecuadorian Nacional variety and other varieties to increase production and disease tolerance, require different growing conditions from CCN-51 hybrid trees. CCN-51 is a clone used throughout Ecuador for bulk cocoa, due to its hardiness, disease resistance, and ability to grow prolific numbers of pods. When the Salazars started their farm, they received advice about growing based only on CCN-51 — tips such as not to use shade trees. This meant the family had to work hard to shift the farm from where it began to ensure that their Neo-Nacional trees thrived: via shade creation, careful disease management, and frequent pruning.

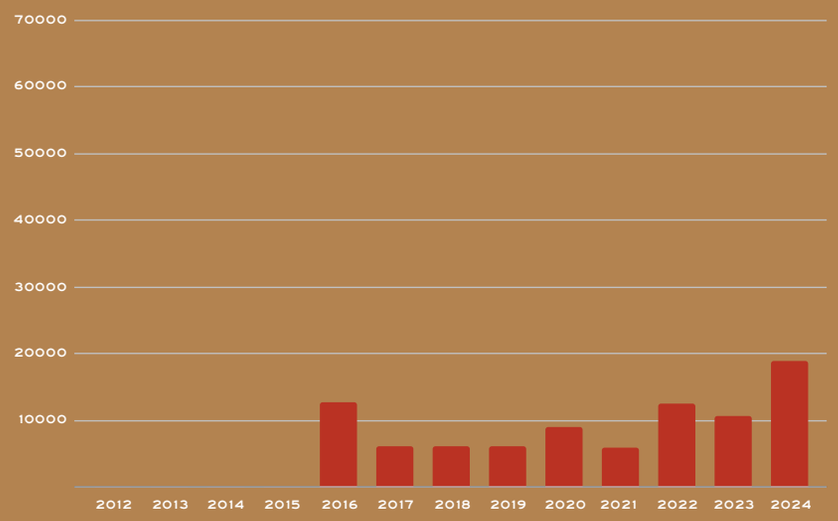
It has not been easy for the Salazars to adjust; at one point they considered selling their farm.

However, Freddy has helped push the business toward experimentation, and he continually learns from others in the industry. At Costa Esmeraldas, Freddy and his team place high value on being good neighbors to nearby communities, and on protecting flora, fauna, water, soil, workers, and everyone involved in or affected by the farm's operations. In 2017, they carefully expanded the farm based on analysis of both the cost effectiveness of new plantings, and the environmental impact of expansion; they selected cacao varieties they envision will cater to chocolate makers' future desires. They also completed a fermentation and drying facility designed by Dan O'Doherty, based on designs from the Fundación Hondureña de Investigación Agrícola (FHIA), the Honduran institute specializing in agriculture and cacao.

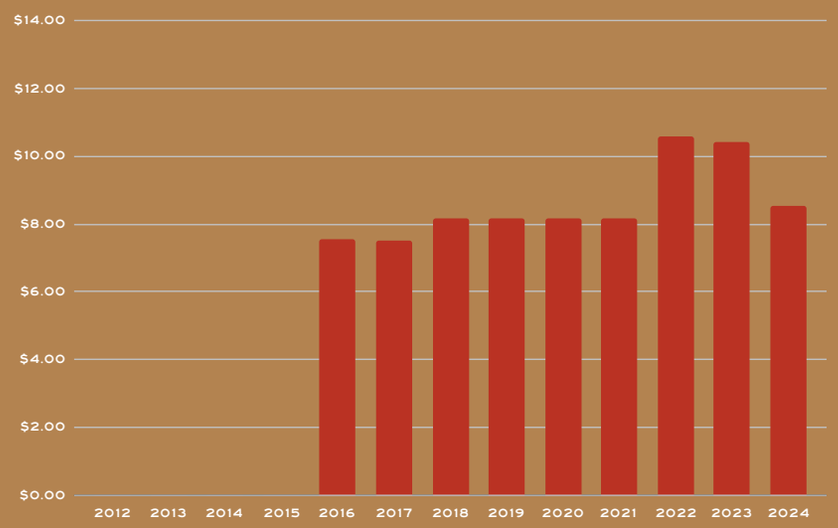
In 2019, the many investments paid off when Costa Esmeraldas earned a Cocoa of Excellence Award. We've worked with Freddy since 2016, and expect that under his leadership, Costa Esmeraldas' well-deserved reputation as a source of high-quality cocoa for global craft chocolate makers will continue to grow, as will his business.

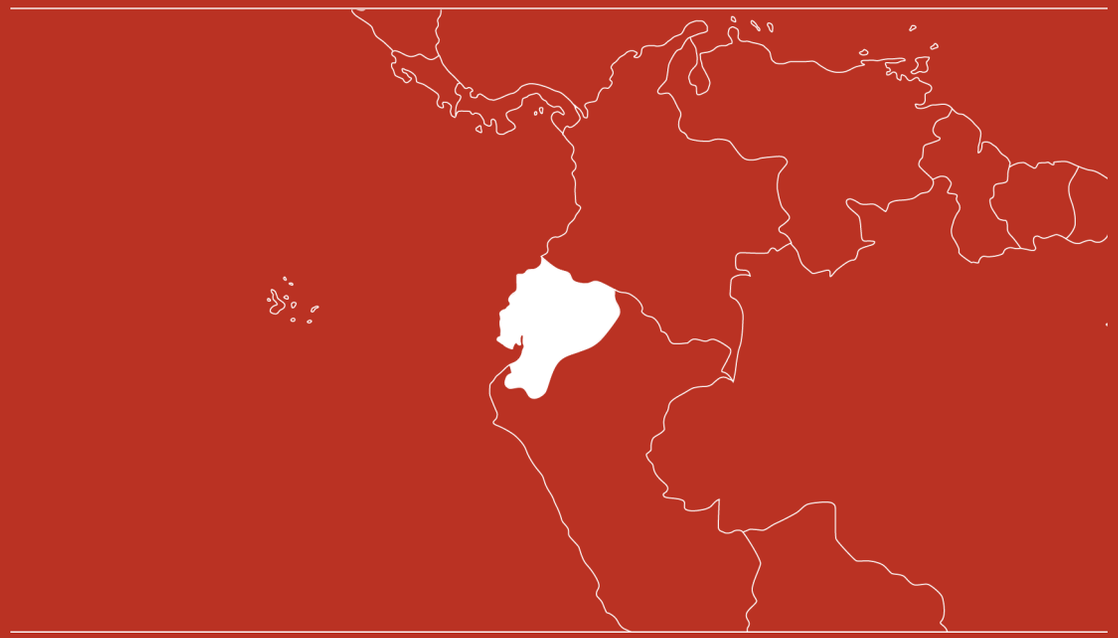
COSTA ESMERALDAS, ECUADOR

Quantity Purchased (in Kilograms)



Average Price per Kilogram





0°47'48.9"N 79°56'16.1"W

FERMENTATION STYLE | 5-TIER BOXES

DRYING STYLE | RAISED MESH BEDS, CEMENT PATIOS, GREENHOUSE

PROFILE BY | ERIC

FLAVOR PROFILE | CHOCOLATE, SWEET AROMATIC, BERRY, DAIRY

COSTA ESMERALDAS GROWS, FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY COSTA ESMERALDAS

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

12.2%

HAWAI'I, U.S.A.

While cacao was brought to Hawai'i in the 1830s by agriculturists who saw potential in the Islands' soil and climate, it wasn't cultivated commercially until the late 20th century, when Dole Plantations became the first operation to start growing cacao at any scale. Hawai'i is the only U.S. state currently producing cocoa commercially (though there are some trees grown mostly for research in a number of other states, including Pennsylvania, Florida, and our very own California).

Greg first visited Hawai'i in 2013 to attend the Hawaii Chocolate and Cacao Association's annual meeting. It was then that he connected with Mānoa Chocolate's Dylan Butterbaugh, Dan O'Doherty of Cacao Services, and Will Lydgate of Lydgate Farms. The goal was to keep our finger on the pulse of American cocoa, and, well, it worked!

Since Greg's initial visit, the Hawai'ian cocoa industry has grown significantly. Ten years ago, most of the cacao was grown in small amounts and fermented in small quantities, leading to a rollercoaster of flavors (which is not always a good thing). The industry is now large enough that there is a centralized fermentary, Māpele Fields, on O'ahu. What used to be small farms, such as Lydgate Farms, are now fermenting many tonnes of beans each year. Dozens of farms spread across Maui, O'ahu, Kaua'i, and of course the Big Island. While it's hard to know exactly how much cocoa is produced in Hawai'i (there is an annual survey, but it relies on people providing information), it is likely in the neighborhood of 100 tonnes per year — a quantity on par with the exports from all of Belize. As you might imagine, Hawai'ian cocoa has always been expensive, since land and labor prices are high, but now quality has caught up with price. Multiple chocolate makers throughout the Islands are making single-origin bars, and winning awards for them.

At Mānoa Chocolate in 2020, Greg met Ben Field of Māpele Fields. The setting of his farm is extraordinarily picturesque: With the steep Ko'olau mountains in the distance and greenery all around, you've never felt more embraced by nature than on Ben's farm. While cacao is relatively new to the Field family, farming isn't. Ben is a third-generation farmer who grew up on O'ahu and received his botany degree from University of Hawai'i at Mānoa. His father's primary focus was tropical plants used for landscaping, but Ben really fell in love with cacao.

Ben started working with cacao back when most people thought it was a fad; and to hear him talk about it, each cacao tree has its own personality and needs and wants. He grows his own cacao, and he also realized early on that he was well situated (both geographically and socially) to build a larger fermentary, where he could aggregate cacao from nearby farms, to form bigger, better ferments. In time, the blended ferments became single-origin ferments, as individual farms produced enough mass to ferment their own batches. If you've ever wondered about the impact of terroir on chocolate flavor, try the four different bars we plan to make from Ben's origins. They've all been fermented with the same protocol in the same facility, but the beans are from different parts of O'ahu, and each origin features a strong, independent character, just like our buddy Ben.

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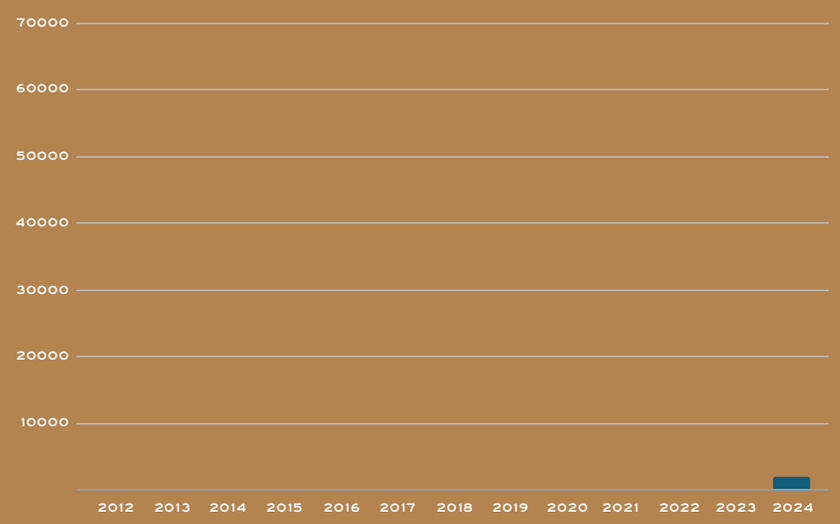
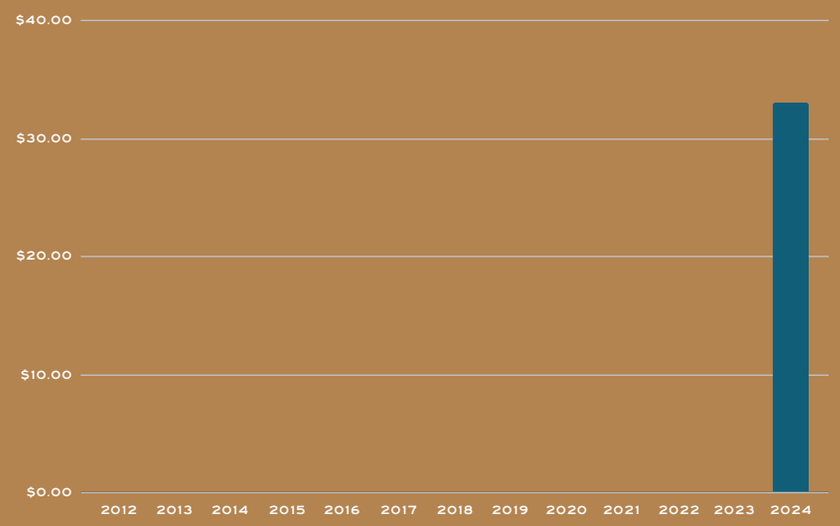
HAWAI'I, U.S.A.

Quantity Purchased (in Kilograms)



Average Price per Kilogram



21°27'09.5"N 157°50'42.5"W

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED MESH BEDS, CEMENT PATIOS, GREENHOUSE

PROFILE BY | TBD

FLAVOR PROFILE | CHOCOLATE, TROPICAL FRUIT, DAIRY

SMALLHOLDER FARMERS & MĀPELE FIELDS GROW BEANS

MĀPELE FIELDS BUYS, FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY MĀPELE FIELDS

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

1.3%

HAWAI'I, U.S.A.

KPALIMÉ, TOGO

It was after the 2022 Salon du Chocolat in Paris that Greg first met Oskar Jönsson, Head of Cocoa Sales at gebana, a Swiss company building sustainable supply chains. Oskar was already working with Dandelion's friend Julia Zotter, of Zotter Chocolate in Austria, and Greg was a fan of Zotter's Togo bar, so he was curious to learn more. Oskar sent us a cocoa sample to evaluate, sourced from Vision+, a cooperative located near Kpalimé, Togo.

After analysis and tasting, we knew there was something special about this cocoa — the flavor profile is intensely chocolatey. Additionally, we appreciated the work that went into the Togo beans, which are grown, fermented, and dried by individual farmers. While that is how most cocoa in the world is produced, none of our prior producing partners works that way; we'd always bought beans from either larger farms, or from centralized facilities, whose operating models tend to offer the best quality control. In Togo, individual farmers grow, ferment, and dry the beans, then gebana grades and sorts them to ensure a good, consistent product.

Cacao came to Togo with French colonizers in the early 1900s. It's grown in the western part of the country, in a relatively small area, especially compared to neighboring Ghana and Cote d'Ivoire (where over 70 percent of the world's cacao is cultivated). Gebana has developed a cacao-farming network in Togo for over a decade, and they now work with about 2,000 smallholder farmers (many certified organic), split into five cooperatives. Cooperative Vision+ — which provides our beans — is made up of 422 smallholder farmers, of whom 64 are women, and 250 are certified organic.

The typical cacao farm in Togo is about half a hectare, and produces on average 250 kilograms of beans a year. It can be a challenge making a living just by growing cacao, so interspersed among cacao trees might be other crops such as coffee, maize, or plantains, destined for local markets. However, the cash from export crops like cocoa is important, as it enables individual investment choices — including medical care, children's continuing education, or simply improving quality of life.

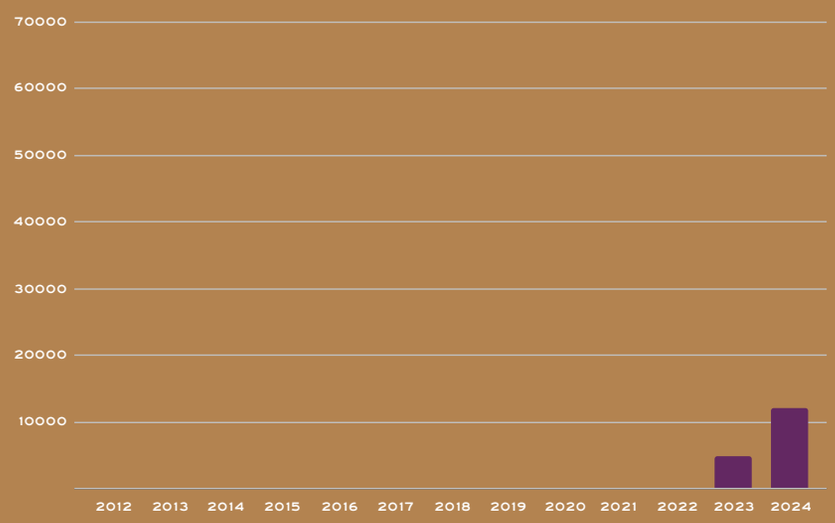
As mentioned, each Togolese smallholder farmer not only grows and harvests their own cacao, but also does all of the fermentation and drying. After harvesting and cracking open pods, farmers pile wet beans into heaps and cover them with banana or plantain leaves, then turn them every few days to achieve an even fermentation — a process that takes around seven days. When fermentation is complete, the beans are placed onto elevated drying tables made of bamboo for about 10 days. Once dried, the beans are brought to a centralized facility where they are sorted, blended, and bagged for export.

Gebana's mission is to bring Togolese cocoa to the world market. The company provides farmers with a variety of seedlings to encourage wider plant diversity within each farm, and provides training in organic farming techniques. Gebana also assists in commercializing other crops besides cacao — as through the production of plantains sourced from Vision+ farmers' plots.

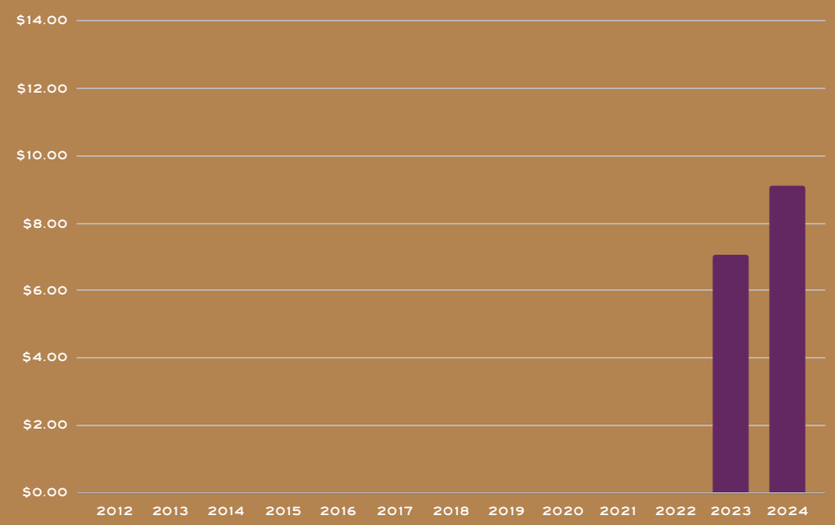
Finally, gebana offers the "gebana Model," which allows businesses like Dandelion to pay a higher price than requested for good cocoa. At the end of each season, that premium is paid out to all of the cacao farmers in gebana's Togo network. This payment model is critically important to ensure that farmers who make a great product get paid for their work. We were delighted to introduce our first Togo bar in 2024, and hope to work with gebana and Vision+ for years to come!

KPALIMÉ, TOGO

Quantity Purchased (in Kilograms)



Average Price per Kilogram



6°54'35.3"N 0°37'47.6"E

FERMENTATION STYLE | HEAP

DRYING STYLE | RAISED BAMBOO BEDS

PROFILE BY | PABLO

FLAVOR PROFILE | CHOCOLATE, SWEET AROMATIC, BREAD

SMALLHOLDER FARMERS GROW, FERMENT, & DRY BEANS

VISON+ CO-OP BUYS & BLENDS BEANS

EXPORT BY GEBANA

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

7.7%

MAYA MOUNTAIN, BELIZE

Maya Mountain Cacao (MMC) is a social enterprise established to connect small-scale cacao growers in Belize to the international specialty-cocoa market. Located in Toledo, near the coast, they were the first company in the country to buy wet beans from farmers, and to emphasize the importance of bean quality. Based around a centralized fermentary, MMC purchases from family farms in southern Belize, committing to a consistent price throughout the season. MMC currently buys from 450 farmers who are registered and certified organic — the majority of whom identify as indigenous Q'eqchi' and Mopan Maya. Dandelion has been buying beans from MMC since 2013, and it has been a pleasure to witness their success.

The popularity of craft chocolate generally, and bars made from Belizean cocoa in particular, has been growing for years. Dandelion Chocolate and other makers produce Belizean bars, so people around the world began paying attention to the tiny amount of cocoa coming out of southern Belize. This led to something of a gold rush. Up until 2016, the only buyers in Toledo were MMC and the Toledo Cacao Growers Association (TCGA). In 2017, six new buyers joined the market; and while competition can be a good thing, in this case it caused a market bubble, driving prices up. If you're familiar with the history of other market bubbles, you can imagine what happened next. Many farmers had sought loans to buy seedlings and supplies, hoping to capitalize on the high prices — and when prices crashed, they were left holding the bag.

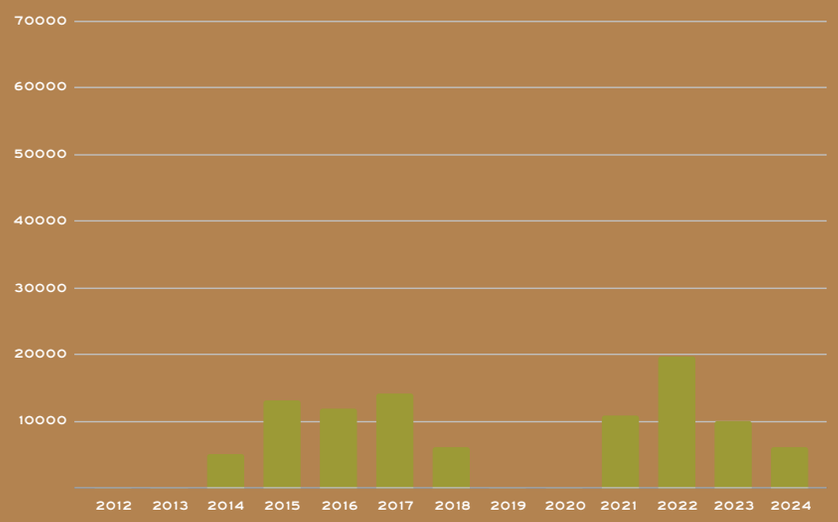
As of 2019, only MMC and two other buyers remain in Belize (TCGA and Belize Chocolate Company). There wasn't enough cocoa to support many businesses, and there wasn't enough demand on the craft-chocolate side to buy cocoa at the temporarily inflated prices. Money spent on expanding cocoa production is not coming back, and other crops that were ignored need to be tended again. Today, MMC pays $3.13 per kilogram dry-weight equivalent for wet beans. This is significantly more for wet beans than farmers around the world typically receive for dried beans, but it's lower than what farmers thought they would make. Farmers bore the brunt of the market collapse.

Maya Mountain Cacao faced significant difficulties in 2024 due to an extended drought caused by climate change. This resulted in widespread wildfires that devastated cacao farms within their network, leading to the loss of many productive trees. Thankfully, Belize's National Emergency Management Organization (NEMO) and the Ministry of Agriculture have launched a program to replace at least 50,000 trees on the affected farms.

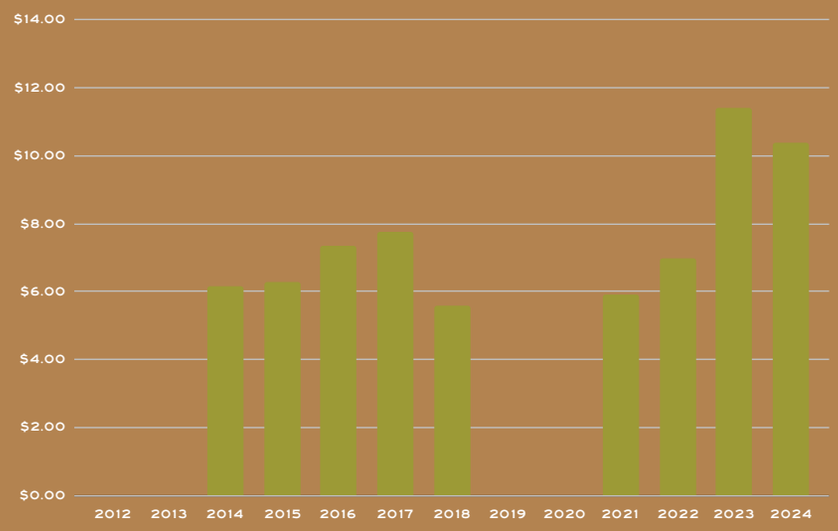
Despite these recent challenges, MMC is currently purchasing a greater volume of beans than in previous years, and is able to pay higher prices to farmers. They are continuing their planned projects, including the establishment of a demonstration farm, which serves as an educational resource for producers, showcasing best practices and enabling experimentation with new techniques such as grafting, and cultivating different cacao varieties. We are excited to see what the future holds for Maya Mountain Cacao.

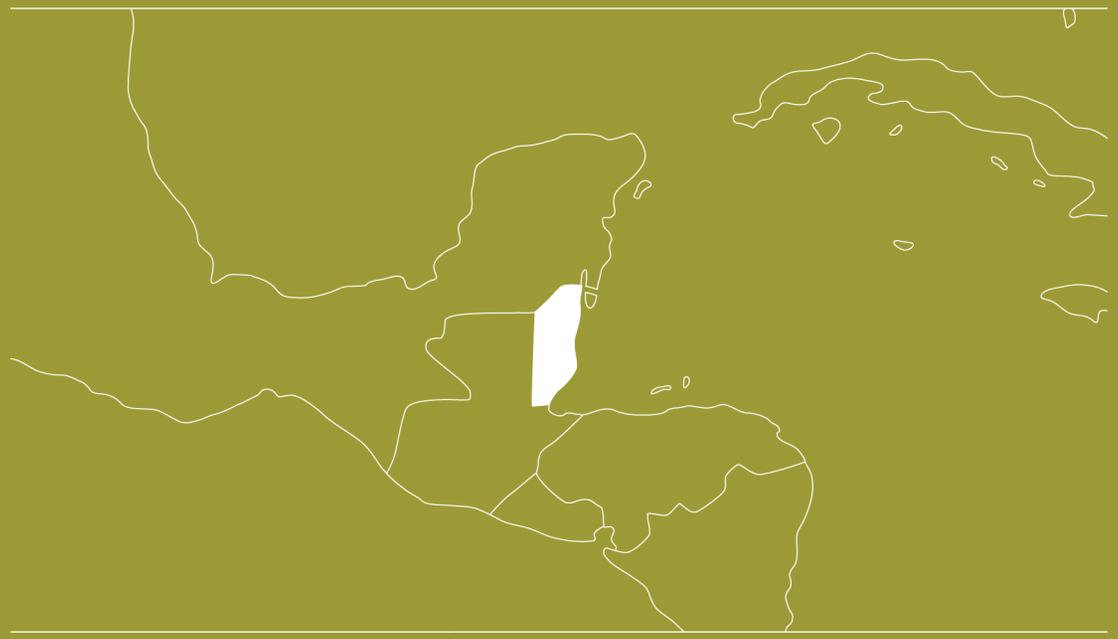
MAYA MOUNTAIN, BELIZE

Quantity Purchased (in Kilograms)



Average Price per Kilogram





16°13'16.2"N 88°55'48.6"W

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED WOODEN BEDS, CEMENT PATIOS, GREENHOUSE

PROFILE BY | TREVOR (U.S.A.) & YUKI (JAPAN)

FLAVOR PROFILE | BERRY, DAIRY, CHOCOLATE

SMALLHOLDER FARMERS GROW BEANS

MAYA MOUNTAIN CACAO BUYS, FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY MAYA MOUNTAIN CACAO

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

3.9%

MAYA MOUNTAIN, BELIZE

SEMULIKI FOREST, UGANDA

We first met Jeff Steinberg in 2017 when he visited our Valencia Street factory looking to understand more about specialty cocoa. He had just launched Latitude Trade Company (LTC) as a social enterprise and certified B Corp, collaborating with Ugandan smallholder cacao farmers to bring local products to market, and he wanted to learn more about our industry. Fast-forward seven years, and LTC now works with over 4,500 smallholder farmers across Uganda, providing training, microfinancing, and insurance, and pays a premium price for the farmers' cacao. LTC also offers training to farming households, on topics ranging from organic agronomy to financial literacy.

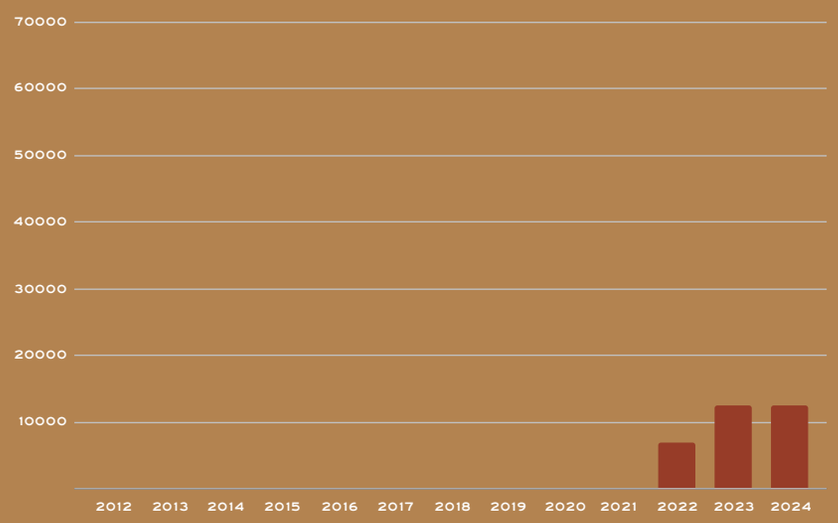
LTC ensures traceability in their supply chain by working directly with farmers, and the LTC field team regularly visits all of their partner farms. The company has set up over 70 rural collection points operating on scheduled days. Farmers harvest their cacao the morning of their coordinated pick-up day, and deliver it to the designated LTC collection point. At the collection point cacao is weighed, the farmer is paid, and each bag of wet cacao is sealed and tagged so it can be traced all the way from the farmer, through fermentation and drying, and into the warehouse.

The specific beans we use are cultivated near the towns of Bundibugyo and Kasese in Semuliki Forest, western Uganda, where cacao is grown by roughly 1,000 organically certified regional farmers, of whom 52 percent are women. LTC has just built a new centralized fermentation facility in the village of Kasese, at the base of the hills leading up into the mountains. This provides the right environment for post-harvest processing, while being in convenient proximity to the farms.

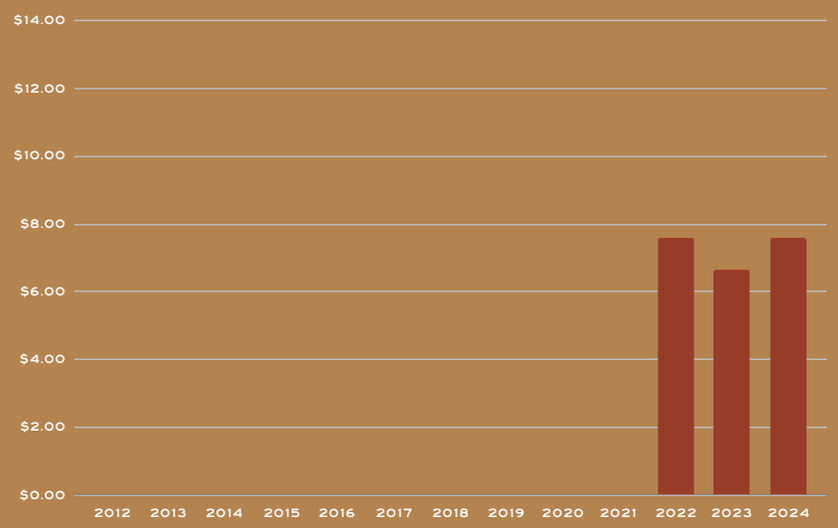
Latitude Trade and their cocoa from Uganda have become mainstays in the craft-chocolate industry. The beans are used by a number of makers throughout the world, including favorites such as Soma Chocolate Makers in Toronto; Fjåk out of Eidfjord, Norway; and Monsoon from Tucson, Arizona. But even once they had good-tasting cocoa, there was one more thing to do: LTC set up their own bean-to-bar chocolate factory and café. The small operation not only brings in additional income, but allows immediate feedback on the flavor and quality of their beans. LTC's chocolate was awarded a bronze medal at the 2017 International Chocolate Awards, and in 2019 their Semuliki Forest cocoa was recognized by Cacao of Excellence as among their "Best 50." If you're in Kampala, you should swing by and tell Jeff we said hi!

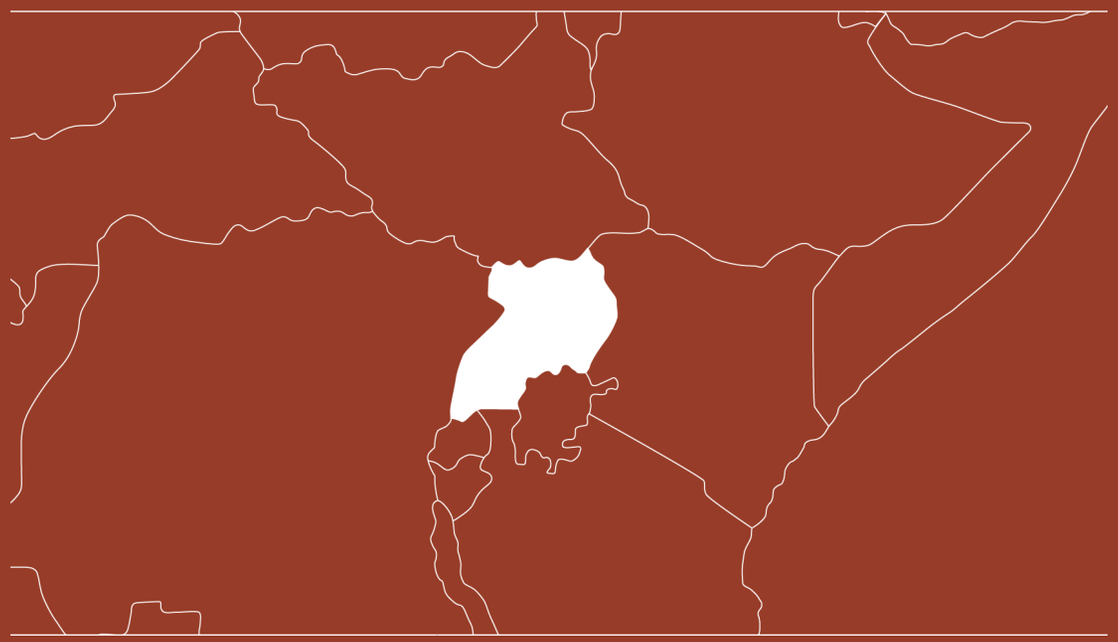
SEMULIKI FOREST, UGANDA

Quantity Purchased (in Kilograms)



Average Price per Kilogram





0°20'21.7"N 32°35'14.8"E

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED WOODEN BEDS, CEMENT PATIOS, GREENHOUSE

PROFILE BY | TREVOR

FLAVOR PROFILE | FRUIT, DAIRY, SWEET AROMATIC, CHOCOLATE

SMALLHOLDER FARMERS GROW BEANS

LATTITUDE TRADE CO. BUYS, FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY LATITUDE TRADE CO.

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

8.1%

SEMULIKI FOREST, UGANDA

TUMACO, COLOMBIA

Cacao Hunters is one of several Colombian companies producing cocoa and making chocolate within Colombia. They are open to innovation and experimentation, making them an ideal partner, and allowing them to produce the best cocoa possible. Cacao Hunters assists farmers tending local cultivars in regions where income generation has been limited by conflict. Owners Carlos Ignacio Velasco and Mayumi Ogata met in Japan in 2009, and have since been devoted to producing high-quality cocoa in challenged parts of Colombia.

One such region, Tumaco, is a lush area famous for coca — and infamous for that crop's issues. Other than coca and cacao, local income sources are limited to avocado, açai, and chontaduro.

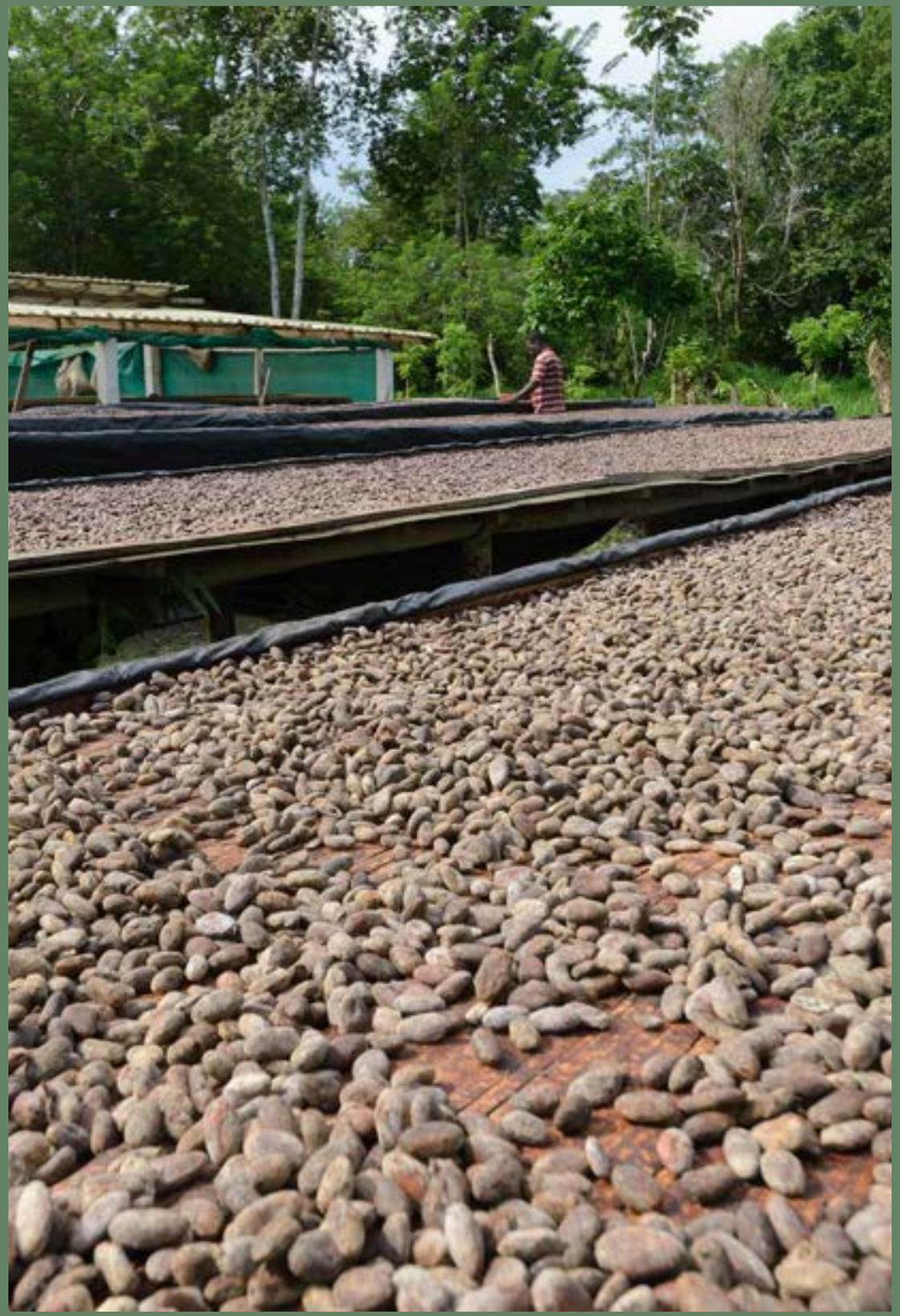
Carlos and Mayumi first traveled to Tumaco in 2011 to evaluate the region's potential for good-quality cocoa, and were shown around by U.N. contacts. They learned that farmers wished to eliminate coca, and hoped to cultivate more cacao. Beans from older tree varieties domesticated through previous centuries had been purchased primarily by Colombian food and chocolate manufacturer Casa Luker at relatively low quality standards, and proportionally low prices. Development initiatives existed, but as they focused on productivity rather than on quality, prices matched supply. Carlos and Mayumi decided to improve post-harvest processing, offering producers quality incentives that could greatly increase income options.

Cacao Hunters collaborates with multiple associations in Tumaco, providing help and advice as each association ferments their own cacao. They also offered technical assistance when the State Secretariat for Economic Affairs (SECO), a Swiss aid organization, and the United States Agency for International Development (USAID) helped establish post-harvest infrastructure (fermentation and drying facilities) in Tumaco, boosting cocoa quality and allowing producers to receive a premium price. Quality improvements have paid off, and Cacao Hunters' products are now found in the best chocolate shops in major Colombian cities.

Cacao Hunters currently seeks ways to invest in Tumacoan producer organizations — through post-harvest-facility investments, working-capital loans, capacity development, and leadership development. Within Tumaco, Cacao Hunters' commercial partners are distributed across two Community Councils: Rescate las Varas, and Bajo Mira & Frontera. The councils' Afro-Colombian and other farmers uniquely understand *cacao baba* (cacao pulp), knowledge essential to standardizing centralized processing. In 2021, Cacao Hunters added to their supplier network an association called Afromuvaras — 460 women cocoa producers who significantly invested in updating their cocoa-processing center, and have benefited from cooperation projects.

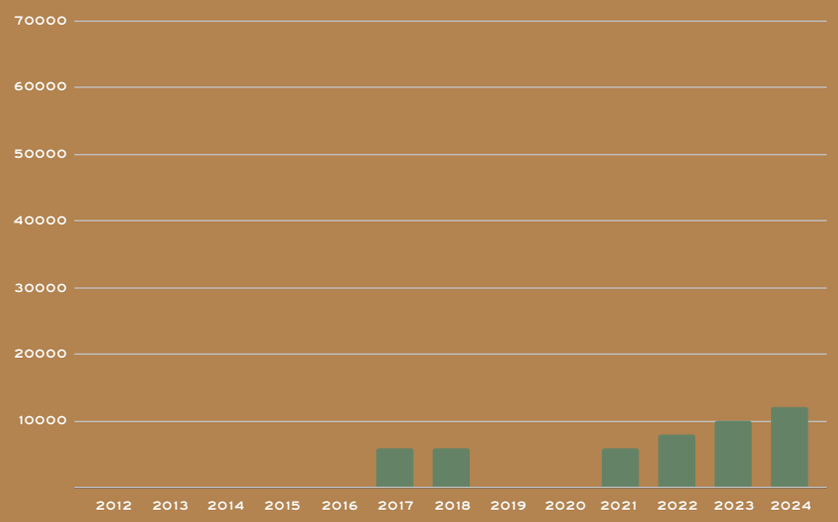
2024's soaring cocoa prices mean that more money is now reaching Tumacoan farmers: a clear incentive to replace coca with cacao. Challenge accompanies widening opportunity, as the bean-drying stage continues to bottleneck production volume of good-quality cocoa. Cacao Hunters Foundation addresses production obstacles through technical assistance for farmers.

Cacao Hunters never compromises quality in favor of quantity, and their contributing producers are committed to producing excellent cocoa. We hope that sustainable production of high-quality cocoa will succeed in this region for many years.

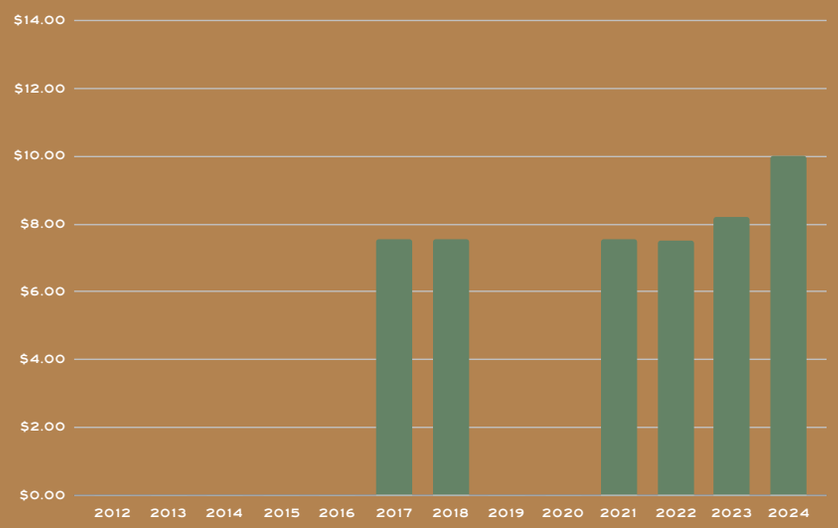


TUMACO, COLOMBIA

Quantity Purchased (in Kilograms)



Average Price per Kilogram



1°40'47.2"N 78°41'03.4"W

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED WOODEN BEDS, GREENHOUSE

PROFILE BY | PABLO

FLAVOR PROFILE | SWEET AROMATIC, CHOCOLATE, DAIRY, NUT

SMALLHOLDER FARMERS GROW BEANS

MULTIPLE CO-OPS BUY, FERMENT, & DRY BEANS

CACAO HUNTERS BLENDS BEANS

EXPORT BY CACAO HUNTERS

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

7.7%

TUMACO, COLOMBIA

VALE POTUMUJÚ, BRAZIL

We spent years searching for the right Brazilian cocoa partners, and in 2016 finally met Juliana and Tuta Aquino from Bahia, Brazil's largest cocoa-producing state. Prior to crop devastation by a cacao disease called witches' broom in the late 1980s, Brazil produced a large portion of the world's cocoa. Over the last two decades, the industry recovered and a new specialty-cocoa market emerged as Brazilians began to enjoy craft chocolate. Now Tuta and Juliana are among a few local "tree-to-bar" producers who grow cacao, harvest and ferment beans, then make their own chocolate. Their tight tree-to-bar-production feedback cycle rapidly improves cocoa quality.

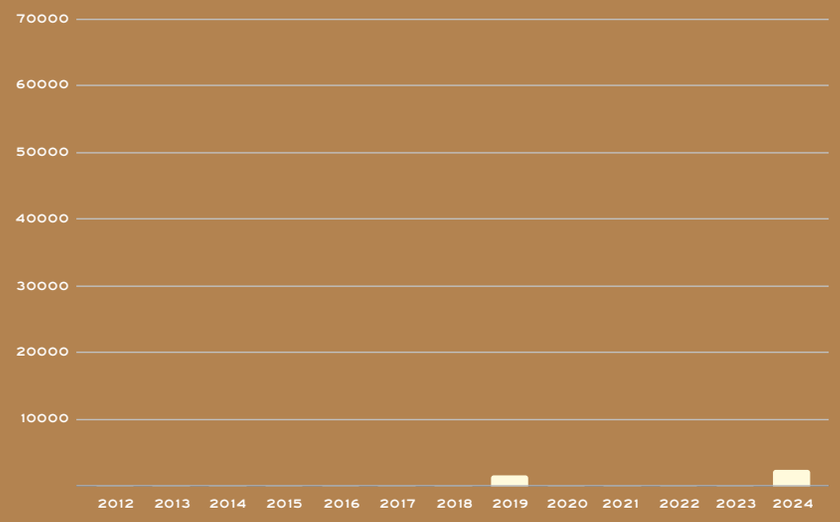
Tuta and Juliana have a deep love for cocoa. They grew up on cacao farms in Bahia, then left to pursue successful careers in the music industry — Juliana is an accomplished bossa nova singer and Tuta is a music editor and engineer. Despite their successes in music, they returned to Bahia several years ago to cultivate and process cacao on Juliana's family farm. They renamed the farm Vale Potumujú ('vale' is valley, and 'potumujú' a type of tree in Brazil), and refurbished operations to achieve excellent bean fermentation, with an eye toward sustainability.

Tuta and Juliana follow a Brazilian system called Cabruca, used to preserve existing rainforests wherever possible while growing cacao underneath. They also hired Dan O'Doherty (who has worked with Costa Esmeraldas, Maya Mountain, Regal Plantations, and many others) to help them develop a world-class fermentation and drying protocol and facility. The flavor results speak for themselves. In her kitchen, Juliana began making chocolate from the farm's beans, which led to the creation of Baianí, Vale Potumujú's own tree-to-bar chocolate brand. Vale Potumujú didn't initially produce very much cocoa; but great relationships and great beans are worth the wait, and after approximately three years, Tuta informed us in 2019 that they finally had enough beans that they could sell us a small quantity.

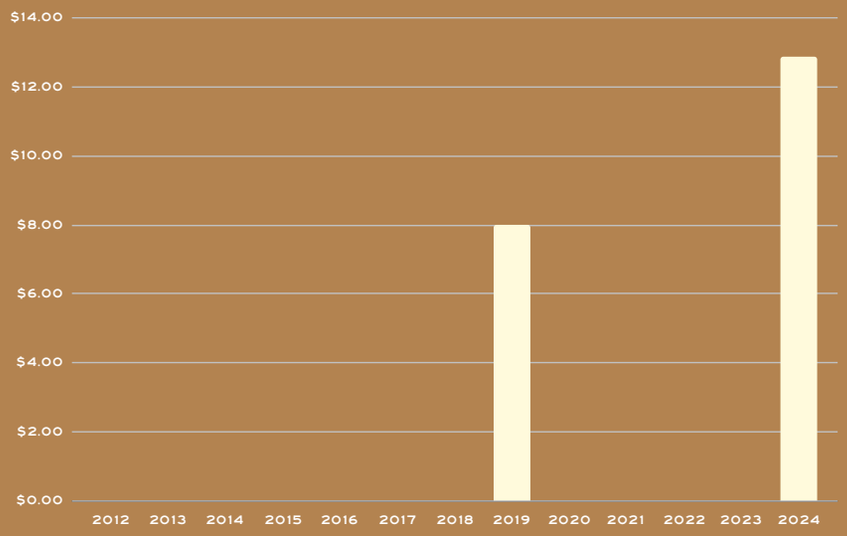
Recently, unpredictable weather patterns caused by climate change have brought excessive heat to Vale Potumujú, hampering cacao trees' flower development, and resulting in a 40-percent decrease in productivity during the first half of 2024. Ongoing related challenges must be addressed to mitigate future impact. The Aquinos' beans' quality and flavor come from decades of passion, years of growth, and months of hard work, and we are thrilled to continue our relationship.

VALE POTUMUJÚ, BRAZIL

Quantity Purchased (in Kilograms)



Average Price per Kilogram



15°13'58.4"S 39°21'02.6"W

FERMENTATION STYLE | LINEAR BOXES

DRYING STYLE | RAISED WOODEN BEDS, GREENHOUSE

PROFILE BY | TBD

FLAVOR PROFILE | FRUIT, SWEET AROMATIC, CHOCOLATE

PRIME CACAO GROWS, FERMENTS, DRIES, & BLENDS BEANS

EXPORT BY PRIME CACAO

IMPORT BY CACAO LATITUDES FOR DANDELION CHOCOLATE

Percentage of total beans purchased from all producers over 2024

1.6%

VALE POTUMUJÚ, BRAZIL

GLOSSARY

CACAO | COCOA
According to most dictionaries, *cacao* and *cocoa* are interchangeable. People often use the word *cacao* when referring to botany or agriculture; and *cocoa* for cocoa powder (fermented, dried, roasted, finely crushed beans, with most of the natural fat [cocoa butter] removed), or beans (usually after fermentation and roasting). We use ***cacao*** to refer to trees, leaves, pods, and raw (unfermented) seeds; and ***cocoa*** to refer to fermented seeds, which are a product. The transformation takes place during **fermentation**, which kills the beans' cotyledons.

CACAO FARMER | PRODUCER
We use the term "cacao farmer" to refer to someone who is involved in the agricultural production of cacao, including planting, growing, and harvesting. Cacao farmers often ferment and dry their own beans, but we would not refer to someone as a cacao farmer if he or she solely *processed* (fermented and dried) beans procured from someone else; we'd call that person a producer.

CENTRALIZED FERMENTARY
A processing facility that collects wet cacao beans from multiple farmers to ferment in one location.

CACAO BEAN | COCOA BEAN
The bitter, purplish seed of the *Theobroma cacao* tree. To make chocolate, the seeds are extracted from the cacao pod after harvest, then fermented and dried before they undergo a chocolate-making process. We call the wet, unfermented seeds *wet cacao beans*; and the fermented, dried seeds — before and after roasting — *cocoa beans*.

COCOA NIB
Small piece of a cacao-seed cotyledon, *after* the seed is fermented, dried, roasted, cracked, and winnowed; the primary ingredient in chocolate.

COOPERATIVE OR CO-OP
An enterprise that is collectively owned and democratically controlled by its members. The structure is designed to meet the common economic, social, political, and cultural needs of the member population, and often involves sharing resources, materials, and skills.

DRY BEANS
Cocoa beans that have been fermented and dried.

DRY WEIGHT EQUIVALENT (DWE)
A term used to refer to prices of wet beans for what they will eventually be worth as dry beans. Wet beans tend to weigh approximately three times more than dry beans. For instance, if farmers are getting paid $3/kg DWE, that would mean they are actually getting paid $1/kg of wet beans, as once a kilogram of beans dries, it will weigh only approximately 0.33 kg.

FERMENTATION
In reference to cocoa beans, fermentation is the process of transforming the compounds within the seeds — usually accomplished by gathering freshly harvested seeds together, typically in a wooden box that may be lined or covered with banana leaves, for about three to seven days. During this time, bacteria and yeast transform the sugars in the pulp surrounding the seeds into acids that change the compounds inside the seeds, establishing the precursors to chocolate flavor as we know it. Fermentation has a substantial impact on the final flavor of a cocoa bean.

GRAFT
A small branch of a mother tree that is inserted onto an established seedling or mature tree. It allows clones of a tree to be used to create identical genetics across a farm.

HECTARE
One hectare is approximately 2.5 acres.

HUSK
The cocoa bean's fibrous outer shell that protects the nib inside. To make chocolate, beans' husks are removed before the nibs are ground.

LINEAR BOXES
Fermentation boxes arranged side by side at ground level. Beans are shoveled from one box to the other every day or two until fermentation is complete.

METRIC TONNE
1,000 kilograms or 2,205 pounds.

ORGANIC
While standards for organic certification differ from country to country, the word generally indicates cultivation practices that are free of pesticides and chemical fertilizers, and usually adhere to high standards of animal husbandry, biodiversity preservation, and minimal waste.

TIERED BOXES
Fermentation boxes arranged vertically, like steps. Beans are rotated from step to step every couple of days.

WET BEANS
Cacao beans, still covered in pulp, that have been harvested and separated from the cacao pod in preparation for fermentation.

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