

Marou is turning six this fall, and we are excited to bring you our first Marou Report.

Written by Sonia Gregor

MAROU CACAO REPORT 2017



Introduction

We have been making chocolate in Vietnam since 2011, working with small farmers to source quality cacao. From the start, we have been committed to strong relationships and quality standards. Now that our network of farmers has grown, we have time to look back at how far we've come, and share some details of our sourcing process.

Cacao is not a major crop in Vietnam, and it has taken us a lot of phone calls and motorbike rides to find farmers who are dedicated to the tree. As one of the only specialty bean-to-bar makers in the country, we offer our farmers a consistent high price, with monthly visits to buy beans. Our local sourcing means that we can buy 100 kg of beans at a time, and give continuous feedback about fermentation and drying methods. If a farmer needs more trees, or another drying rack, we offer technical and financial support.

Vietnamese cacao is a small fraction of the country's agricultural output, and a small speck of global cacao production, but we are happy to be working in this system. Our farmers have chosen cacao because they are truly interested in how this plant grows. Many of them are older couples who spend all day tending to the cacao trees planted behind their house, and the beans drying in front. When we visit, they offer us bananas and jackfruit from the shade trees. Our wonderful network of farmers is the reason we have been able to bring you the many delicious flavors of Vietnamese chocolate.

LEFT: A BAG OF CACAO THAT PASSES OUR QUALITY TEST IS WEIGHED BEFORE BUYING.

Vietnam and cacao; Key statistics



THE MOST COMMON GENETIC VARIETIES GROWN IN VIETNAM WERE DEVELOPED BY A BREEDING PROGRAM AT NONG LAM AGRICULTURAL UNIVERSITY IN THE 1990S

Population: 92.7 million Below national poverty line: 13.5%

GDP: 202.6 billion USD

Growth rate: 6.2% yearly Agriculture: 18% of GDP Major crops: coffee, rice, pepper, cashew, rubber

Cocoa production: 2,500 Tons in 2016 Less than 0.1% world production

ICCO Fine Flavor Cocoa designation: 2016 40% of Vietnamese cocoa

(SOURCES: 2016 WORLD BANK, AND VIETNAM CUSTOMS FIGURES)



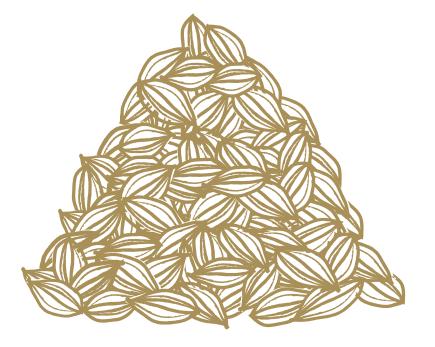
6 cacao origins

Our Single Origin chocolate bars are made with cacao sourced from six provinces in southern Vietnam: from north to south Dak Lak, Lam Dong, Dong Nai, Ba Ria, Tien Giang and Ben Tre.

The climate, soil, and water of each province (call it terroir if you want) as well as the mix of cacao varieties and post-harvest practices contribute to the different flavors of each origin, which in turn make the different flavours of each bar.

There are more provinces that grow cacao, and we are always interested in finding new farmers to work with and in encouraging new farmers to plant cacao in Vietnam.

Our Sourcing Philosophy: Local & Sustainable



Local:

We source all our ingredients from Vietnam. In addition to cacao, our sugar, coconut milk, spices, and fruit all come from Vietnam. Our coffee chocolate bar is made with Arabica grown and processed in Lam Dong province. Even our paper wrappers are screen-printed by hand in Ho Chi Minh City. Working with small companies and buying locally makes it easier for us to personally check the quality of goods supplied.

Sustainable:

We want to make chocolate with Vietnamese cacao for decades to come. That means paying our farmers enough, encouraging the next generation, and maintaining the health and diversity of their surrounding ecosystem.

We see in person that our farmers grow diverse crops and minimize their chemical use. Our farmers use shade trees such as coconut, banana, durian, mangosteen, and jackfruit. Chickens roam between the trees, and occasionally goats eat pod husks. Animal waste and compost provide fertilizer. In the Mekong, many farmers keep fish in the canals between rows of trees. Most of our farmers use ants for biocontrol. These diversified farming systems all but require organic methods.

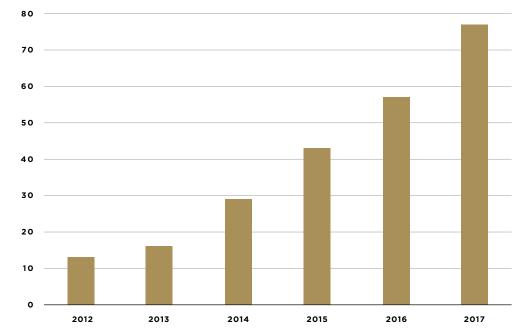
At the same time, we understand that each of our farmers is working on a small scale and in a unique context. We don't require international certifications because we'd rather see that money go directly to the farmers. We have also partnered to develop a cacao agroforestry project, demonstrating an alternative to deforestation.

6 Years of Marou 2012 - 2017

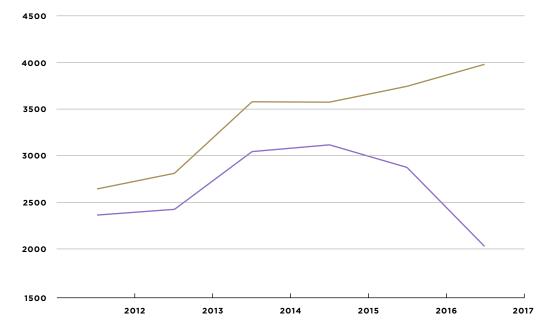
When Marou began, fine chocolate was practically unheard of in Vietnam. That was the appeal and also the challenge.

As we increased chocolate production, we became able to buy more beans from farmers, and grow the network of farmers we purchase from. At the same time, we have continued to raise our prices, even as the commodity price for cacao has dropped off. We want to ensure our farmers can make a living growing cacao, so that they will continue to grow it, and encourage the next generation of farmers to see cacao as a viable option.

CACAO PURCHASED IN METRIC TONS



MAROU PRICE COMMODITY PRICE



Last Year Overview: Jul 2016 - Jun 2017



Provinces purchased from: 7

Number of farmer-fermenters who sell us beans: 25

Number of pod farmers who sell to our farmers: 764*

Cacao beans purchased: 104 Tons

Average farmgate price paid by Marou: \$3940 per Ton

Average commodity price: \$2391 per Ton

Number of purchasing trips to farms: 201

*AS REPORTED BY THE FARMERS



Our bean selection process

We test every bag of cacao that our farmers produce, and select only the ones that meet our quality standards. Farmers are free to sell the remaining beans to other buyers.

At the end of each purchasing trip, the bags that passed our tests are sealed and weighed at the farmer's house.

Farmers are paid on the basis of the amount selected at the farm typically within 3 working days of the selection.

We coordinate and pay for all transportation from the farms to our warehouse in Saigon. These amounts are not deducted from the amount paid to the farmers, regardless of the actual cost to us.





Ben Tre province

Ben Tre province is a triangle of land where the Mekong Delta meets the ocean. The land is netted with rivers and canals, connected by bridges and ferry boats. Farmers use the rich soil to grow rice, coconuts, and cacao. Cacao trees grow on narrow banks between water channels, shaded by the large leaves of coconuts and bananas. Throughout Vietnam, Ben Tre province is famous for coconuts, so when we made a coconut milk bar, we paired it with cocoa beans from Ben Tre.

The Mekong River Delta is well suited to cacao, with abundant water, good soil, and favorably hot temperatures. Ben Tre and neighboring Tien Giang province have many farmers who planted cacao in the 1990s, or even earlier with Soviet support. The cacao harvest from Ben Tre is larger than any other provinces, but its location in a river delta also puts it at serious risk. If sea levels rise even 1m, much more of the land will become brackish or saline, unsuitable to cacao trees.

Fermenters: 5 Pod Farmers: 374 Average price per ton: \$3,848 Number of farm visits: 52 Support actions: Cement drying patio for Mr. Son

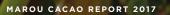




Coconut palms intercropped with cacao is a common sight in Ben Tre. Mr. Son ferments cacao from his own land and from surrounding small farms. Neighbors often use their motorbikes to drop off small quantities of pods.

TOP RIGHT: MR. SON WAS THE FIRST FARMER WE PURCHASED FROM IN BEN TRE. LAST YEAR WE HELPED HIM BUILD A CEMENT PATIO TO IMPROVE HIS DRYING PROCESS.

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Tien Giang province

In the Mekong Delta, Tien Giang province is densely populated and boasts innovative agricultural practices. We drive past extensive farms of dragon fruits, rice, chili and coconut. Our cacao farmers keep honeybees or raise fish in the canals that irrigate their trees. For many years the district of Cho Gao benefited from a strong cacao growing program, having a rare caco cooperative, supported by foreign aid organizations. They offered farmers training sessions and support for certifications, which was under way at the time when we started buying from them in 2012. Unfortunately, the co-op folded and is no longer selling cacao beans. But we have maintained direct contact with most of its former members, enabling us to follow-up on fermentation closely, and insure that they get paid for the quality of their work.

Tien Giang is also facing the threat of rising salinity and drought. In 2017, the province announced plans to tackle this agricultural issue with sluices to prevent the intrusion of salt water. They also encouraged rice farmers to switch to fruit trees and aquaculture. How this future will impact cacao is not clear, but we feel confident in our dedicated cacao farmers.

Fermenters: 7 **Pod Farmers: 1**59 **Average price paid to farmer:** \$4,093 per Ton Number of farm visits: 48 **Cacao seedlings bought** and delivered: 1,650 **HCP designation:** Mr. Cong **Tan Phu Dong Treasure Island**





Mr. Minh shows off one of his honeybee hives, shaded by a young cacao tree. This year we upgraded from motorbikes to cars for sourcing trips. Our 1991 Citroen AX's small size is good for navigating Saigon traffic, and backing out between rice fields!

Treasure Island Heirloom Cacao #13

When we first tasted Mr Cong's cacao, we knew we had found something extraordinary. Mr Cong's farm is on a small island in Tien Giang province, whose name translates to "Treasure Island". We used that name for a limited edition bar made with just Mr Cong's beans, along with the 85% bar, "Heart of Darkness".

Mr Cong's farm is on a small island barely above sea level. Hoping to celebrate and protect his trees, we contacted the Heirloom Cacao Preservation Fund. After flavor and genetic analysis, they gave his cacao the designation of heirloom variety #13.

Unfortunately, just as his trees were gaining international recognition, the worst drought in 50 years hit the Mekong Delta in 2016 and threatened their existence.

Treasure Island is next to the ocean, and many cacao trees died due to lack of fresh water and rising salinity. We are helping Mr Cong to re-plant cacao, but his neighbors are turning to other crops. If he does harvest in the future, it will be on an even smaller scale than before. We're hoping for the best. Whatever happens, we're glad we got to taste Treasure Island before it slipped off the map.





TOP RIGHT: MR CONG IN HAPPIER DAYS BOTTOM RIGHT: COCONUT TREES THAT SURVIVED THE DROUGHT, NEXT TO SHRIVELLED CACAO TREES



Ba Ria province

Ba Ria was the first province we ever bought cacao from. East of Ho Chi Minh City, this coastal land is sunny and wellsuited to fruit trees. In addition to cacao, our farmers grow jackfruit, durian, pomelo, and black pepper. Some of our farmers in this province take a scientific approach to their agroforestry, testing different brands of fertilizer, and closely monitoring the temperature of their fermentation. They have even found a way to raise goats by feeding them chopped up cacao husks.

Although Ba Ria has rich soil and great weather, it has been hard for us to secure enough beans for our growing needs. Last year we offered our farmers technical and financial support to improve their post-harvest practices. One difficulty we face is new cacao companies in the region who are trying to buy pods from the same small network as our farmers. In response, we agreed to pay a bonus for each kilo of pods, and delivered that money to the pod farmers as part of a group meeting with the fermenters and pod farmers.

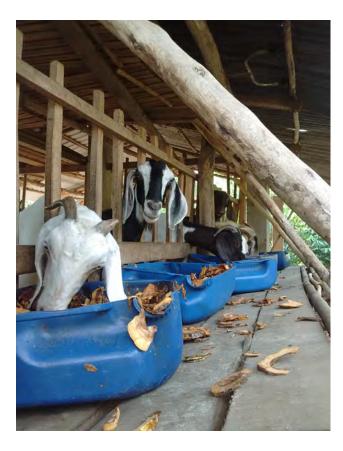
Fermenters: 4

Pod Farmers: 29

Average price paid to farmer: \$4,001 per Ton

Number of farm visits: 45

Financial support: Drying racks for Mr. Duc and Mr. Duong. Bonus for pod price. Paying close attention to the fermentation and drying of beans is crucial to the quality of cacao. Last year we helped Mr Duong build two new drying racks. We stayed in Ba Ria for two weeks observing fermentation and drying to help our farmers identify areas for improvement. After breaking pods, Mr Duong and his wife shred the remaining pod husks and feed them to their goats.









Dong Nai province

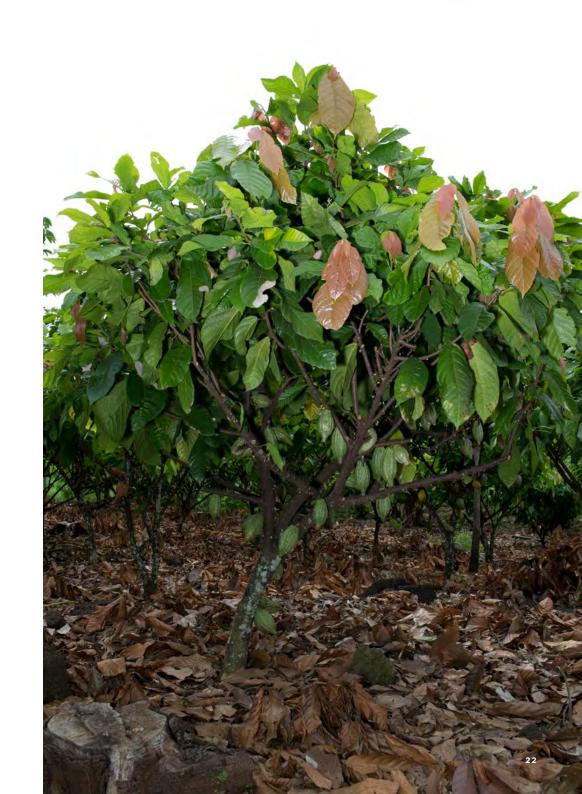
If you drive east and north of Ho Chi Minh City, you enter the gentle hills of Dong Nai province, many of them the long eroded remains of old volcanos. The sun here is still strong, but there is less water and poorer soil compared to the rich lands of the river delta. One of our farmers has walls around their cacao fields built with volcanic rocks taken from those fields. Our farmers are spread out along the upper Dong Nai river valley, near Cat Tien National Park, one of Vietnam's largest areas of lowland tropical forest. Endangered species like black-shanked doucs and pygmy lorises still make their home within the park. Primate scientists from the park recently travelled to Indonesia and found lorises in the cacao plantations there. Hopefully, this means our farmers are providing suitable habitat for lorises as well.

The farmers we work with in Dong Nai all produce small quantities, so in 2013 we had a go at setting up our own centralized Fermentation Station in order to have a reliable source of beans, but high running costs led us to close the fermentation station in 2016. We are still making chocolate with beans from the station, but we probably will run out by the end of 2017. In the meantime, we have re-invested in our farmers, helping them plant more cacao seedlings and pay more for the pods that they buy.

Fermenters: 🕄 Pod Farmers: 26 **Average price paid to farmer:** \$3,895 per Ton Number of farm visits: 24 **Cacao seedlings bought and** delivered: 1,100 **Financial support: Bonus for** pod price for Mr. Tuyet



Instead of pesticides, most of our farmers use ants for biocontrol. Ant houses are made out of bamboo filled with leaves, and strapped to the trees. Depending on the type of ant, farmers feed them sugar water or raw chicken to encourage them to stay. The ants will attack tea mosquitos, stem borers, and the like, protecting 'their' cacao trees. The farmers save costs, and stop spraying insecticides to keep the ants healthy.





Lam Dong

We have purchased beans from Mr. Doai since 2012. His farm is located near the town of Madagui, at the foot of the Bao Loc plateau. Further north in Lam Dong province, is the famous town of Da Lat, created a century ago as a high-altitude resort to escape the heat of Saigon before air conditioning was available... Dalat is famous for its Arabica coffee and other crops that require a less tropical climate than cacao (artichokes anyone?). When we wanted to make a chocolate bar with Vietnamese coffee, Lam Dong beans were the obvious choice.

Mr. Doai and his wife, Mrs. Thuy Kieu, produce an impressive quantity of beans for one family. Their children and Mr. Doai's mother help with the farm, and always greet us warmly. Last year we helped Mr. Doai plant almost 2000 cacao seedlings on his land.

Fermenters: 1 Pod Farmers: 80 Average price paid to farmer: \$3,812 per Ton Number of purchasing trips: 14

Cacao seedlings bought and delivered: 1,900





Mr. Doai holds up traffic while modelling the best way to transport pods with a motorbike: 2 metal baskets over the back wheel, and a sack between the knees. Mr. Doai's mother showing her lacquered teeth, once a widespread tradition and now an increasingly rare sight.

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Dak Lak

Continuing north, the rolling hills grow closer together, becoming the central highlands of Dak Lak province. At 500m elevation, many farmers here grow coffee or rice. Cacao was introduced here more recently, in the mid-2000s. The Success Alliance, a public-private partnership for cacao, saw potential in Dak Lak province because it was not threatened by rising sea levels like the Mekong delta. It also offered an opportunity to alleviate poverty in indigenous minority groups in the area. During its lifetime, this project formed a network of small scale producers and fermenters. When we started to purchase Dak Lak beans in 2015, the farmers we contacted were former leaders in their local networks.

At this elevation in the mountains, the temperature decreases considerably during the night. Condensation and rain leave emerald green moss on the trunks of cacao trees. The temperature change makes consistent fermentation more challenging. Last year we stayed for two weeks with our farmers to help them monitor their post-harvest processes and make adjustments.

Fermenters: 2

Pod Farmers: 7

Average price paid to farmer: \$3,832 per Ton

Number of purchasing trips: 12

Support: fermentation trouble-shooting







During the rainy season, the dirt road to Mr. Quang's becomes significantly more difficult to travel on. The cacao trees do not seem to mind the bright green moss, as they continue to produce pods.

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Developing: Dak Nong



Last year we began purchasing beans from Dak Nong province. The most important indicator of a region's potential for us is the personality of the farmers. In Dak Nong, we have been lucky to find a farmer who's motivated and open to experimentation.

We give them feedback on fermentation during each purchasing trip, and by phone in between trips. As a result, the quality of their beans has improved over the last year, and we have been able to purchase more from them. We hope you will see more Dak Nong beans in our chocolates in the future.

Fermenters: 1

Pod Farmers: 26

Average price paid to farmer: \$3,758 per Ton

Number of purchasing trips: 6

Support: fermentation trouble-shooting

Madagui Agroforestry Project

Two years ago, we met Xavier and Huyen, a French-Vietnamese couple who own a forestry concession in a remote part of Lam Dong province. The local government had deeded them 400ha of hilltop land, including 150ha of protected primary forest. Within that land, parcels of secondary forest were designated for planting, and the government required them to plant tree crops in order to keep the land. Like their neighbors, they had planted rubber, but Xavier and Huyen were looking for a more sustainable option. We introduced them to cacao, as it can be planted under a thinned forest canopy. Over the past two years, we have helped them plant 9000 cacao seedlings of 9 genetic varieties. The oldest trees have put forth their first cherelles this year, and we're hoping to have enough pods for single variety fermentation batches in 2-3 years.





Cacao trees planted: 9000 Area of shade-grown cacao: 8 ha Density of shade trees: >300 trees/ha



THEN AND NOW: SEEDLINGS IN 2015 WAITING TO BE PLANTED, THE FIRST TREE TO HAVE CHERELLES IN 2017.



Sourcing Team

Last year we made a whopping 201 trips to individual farms.

Marou's intrepid sourcing team is led by Thuy (in blue jeans) with Phong (raising cacao aloft) and Sonia (staring off stage left). We made those trips with motorbikes, buses, ferries, planes, rental cars, and the ever photogenic yet temperamental Citroen "La Dalat".

Bumping along dirt roads between rice fields, or whizzing past endless rubber plantations leaves us plenty of time to admire the rural scenery of Vietnam, and its impressive agricultural output. But the best part of any visit is talking to the farmers, whose intelligence and hard work make it all worthwhile.







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