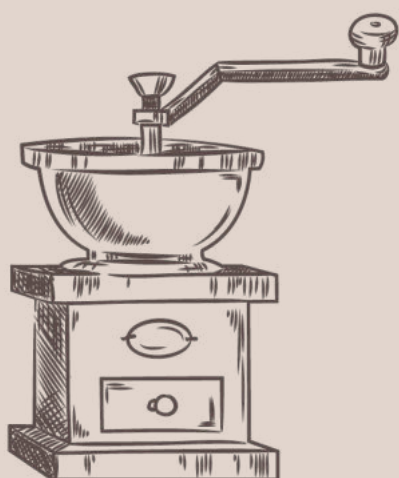


A large, irregular watercolor splash in shades of brown and tan, resembling a coffee stain, frames the central text.

A Global Perspective on Coffee

Joy & Misery



by Matthias Langer & Malin Klinski



We will spill



the beans!



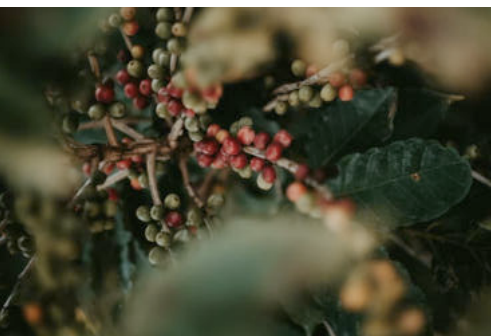
We both try to live a conscious life. We are vegetarians, buy our clothes mostly second-hand, when we go on holiday we take the bike or the train. But we feel that it is never enough and that some habits are just hard to change. Coffee, for example. We both love sitting at the breakfast table with a hot cup in our hands. So we wanted to know: How bad is it for the environment to drink coffee every day? What is the most sustainable way to consume it? What are the working conditions like on coffee plantations in Colombia? How does climate change affect coffee cultivation in Indonesia? We also wondered about the importance of coffee to people around the world, how it affects life in Vietnam and Sweden, and how the black bean is interwoven with the structures, movements and dynamics of our complex worlds. How is it enacted in the past, present and future? We learned about coffee ceremonies in Ethiopia, about the different waves of coffee in history and how coffee can connect the world we live in when we look at it from many different perspectives.

We hope you have as much fun reading this magazine as we had writing it!

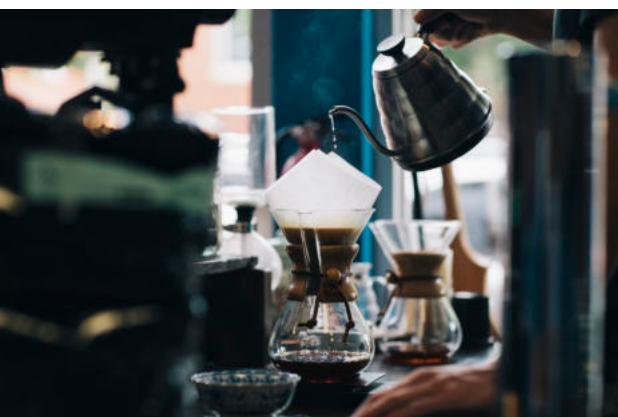
Matthias & Malin

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"I'd rather take coffee than compliments
just now." Louisa May Alcott, Little Women



Rachel
Carson
Center

ENVIRONMENT AND SOCIETY

COFFEE AS A GLOBAL COMMODITY

Coffee is a widely consumed commodity. The tart beverage spread from the 16th century via the Ottoman Empire to Europe and later conquered the whole world. However, it celebrated its final triumph mainly in the course of the industrial revolution. In order to maintain their "body discipline," workers consumed increasing amounts of caffeine and sugar, which even "became substitutes for whole foods with high nutritional content" (Tucker 2017). Although at least the working conditions of European labourers have improved since the beginning of industrialisation, increased coffee consumption is still part of everyday (working) life for many. Today, every German drinks an average of 3.2 cups of coffee per day. According to the Tchibo Coffee Report 2021, coffee is the most popular beverage in Germany and primarily used to increase one's own sense of well-being. However, it is often not considered which way the product had to travel in order to end up hot and steaming in so many coffee cups every day. Figure 1 shows a typical product chain that begins with a coffee picker and ends with the consumer. The listing is based on Vogt 2019 and may sometimes differ. One example is when roasteries source their coffee directly from farmers. More information on the different types



of value chains will in a later chapter. The cultivation of coffee is reserved for only a few regions due to the climatic conditions. The term "coffee bean belt" refers to the area between 23.4 degrees north and south latitude where the world's coffee production takes place (International Coffee Organization 2020). The next two pages show the largest coffee-producing countries in terms of volume according to the International Coffee Organization. Although terms like "sustainability" or "equity" are increasingly common in today's coffee culture, they are rarely questioned further. In this magazine, we take a closer look at sustainable coffee culture. For this purpose, we spoke with people from various backgrounds. We make no claims to provide an overall picture of the subject, as this is almost impossible. We want to convey diverse impressions and tell personal stories that illuminate the complexity of coffee cultivation in relation to environment and society.

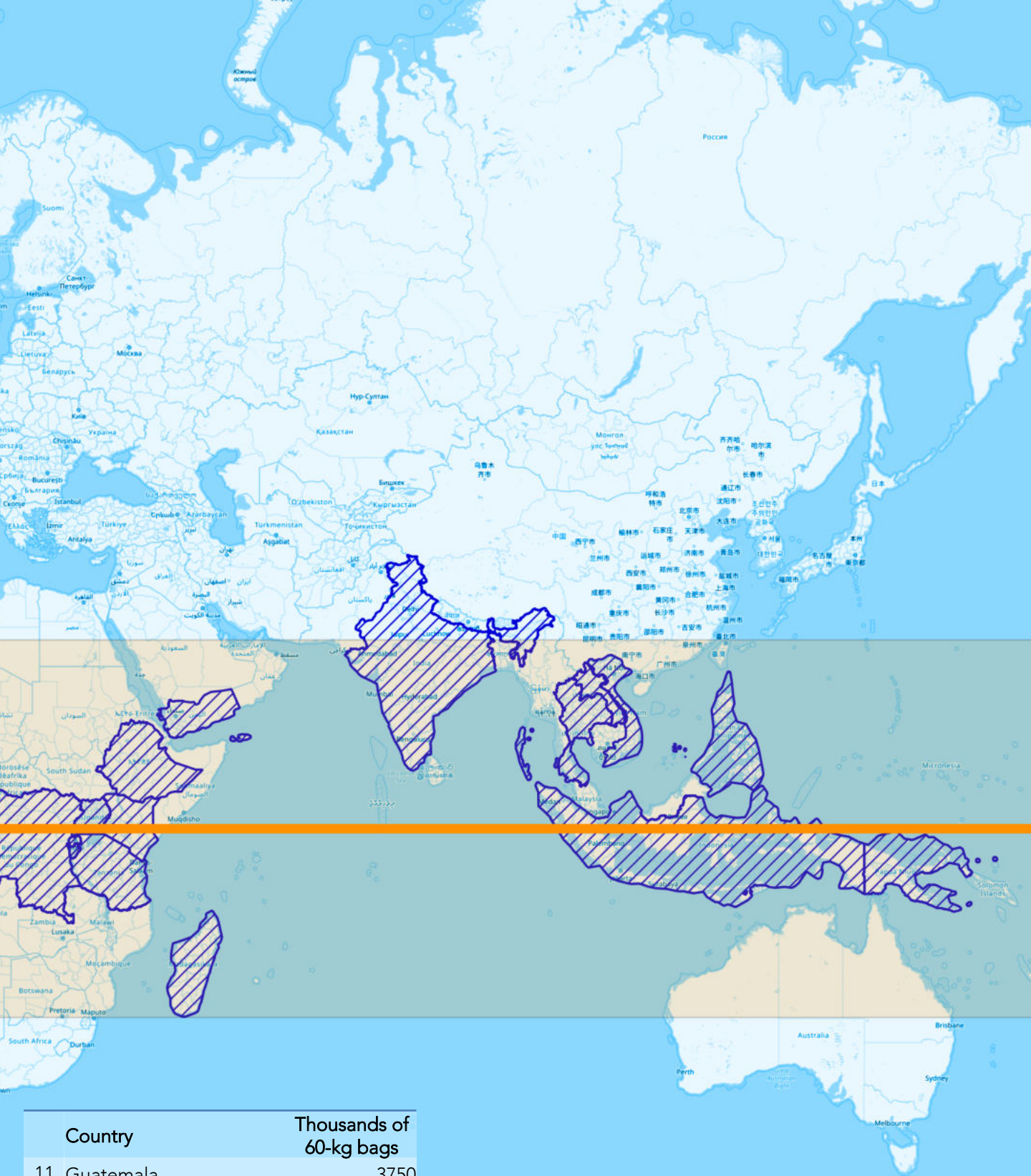


The Global Value Chain of Coffee



ANNUAL COFFEE PRODUCTION (as of 2020)

Country	Thousands of 60-kg bags
1 Brazil	63400
2 Vietnam	29000
3 Colombia	14300
4 Indonesia	11950
5 Ethiopia	7375
6 Honduras	6100
7 India	5700
8 Uganda	5620
9 Mexico	4000
10 Peru	3794



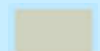
Country	Thousands of 60-kg bags
11 Guatemala	3750
12 Nicaragua	2650
13 Côte d'Ivoire	1775
14 Costa Rica	1450
15 Tanzania	913
16 Kenya	775
17 Papua New Guinea	683
18 El Salvador	600
19 Lao People's Democratic Republic	600
20 Thailand	500



Main regions with coffee cultivation



Equator



"Coffee Bean Belt"

Own illustration; Sources: OpenStreetMap, International Coffee Organization



A LIFE DIPPED IN COFFEE

Britta Fritz is 24 years old and studies psychology. Apart from that, she is also a coffee expert. She talks to us about the benefits of Geisha coffee, gender inequality in the global coffee value chain and the vibrant community of Medellín's coffee scene.

Britta's love for coffee started at an early age. As a small child, she was on holiday in Colombia for the first time, and from then on, she never let go of her enthusiasm for the country and its coffee. It was then that she drank her first cup of coffee, the beginning of her great passion. She returned to Colombia during her school years and later for a semester abroad during her studies. She had come to Medellín to attend the local university. However, there was a general strike and her planned lectures and seminars were cancelled. Instead of travelling around the country, Britta decided to train as a barista. She didn't have to look far, in Colombia there are not only training courses but even a 2-year university degree program on coffee. In a roasting test, for instance, you have to be able to taste at what altitude the beans were grown and whether they were infested with a pest. If you can roast well, you can get much more out of the coffee. You learn how to roast and learn how, during the roasting process, the precious flavours of the bean are unfolding.

La animada escena del café

Britta really enjoyed being a barista and through this experience she began to get in touch with the coffee scene in Medellín. Soon she was invited to coffee tastings, was allowed to watch special roasting processes, travel to fincas and get to know the local coffee farmers. She took a job as a barista in a café and met more and more people from the local coffee scene who became



her friends. Britta's boss from the café in Medellín, who travels personally to all his fincas, took her with him on his trips to collect the coffee beans.

Cold Coffee

Since then, Britta only drinks so-called speciality coffee. Specialty coffee describes the quality of the green coffee and the concept that specific geographical growing areas and microclimates produce coffees with special flavour profiles. The SCA (Specialty Coffee Association) has developed a rating system for the quality of green coffee in which the coffee is evaluated physically and sensory, i.e. according to sweetness, acidity, aroma and so on. Sensory evaluation of coffee is done in tastings on a scale up to 100 points. From 80 points, a coffee



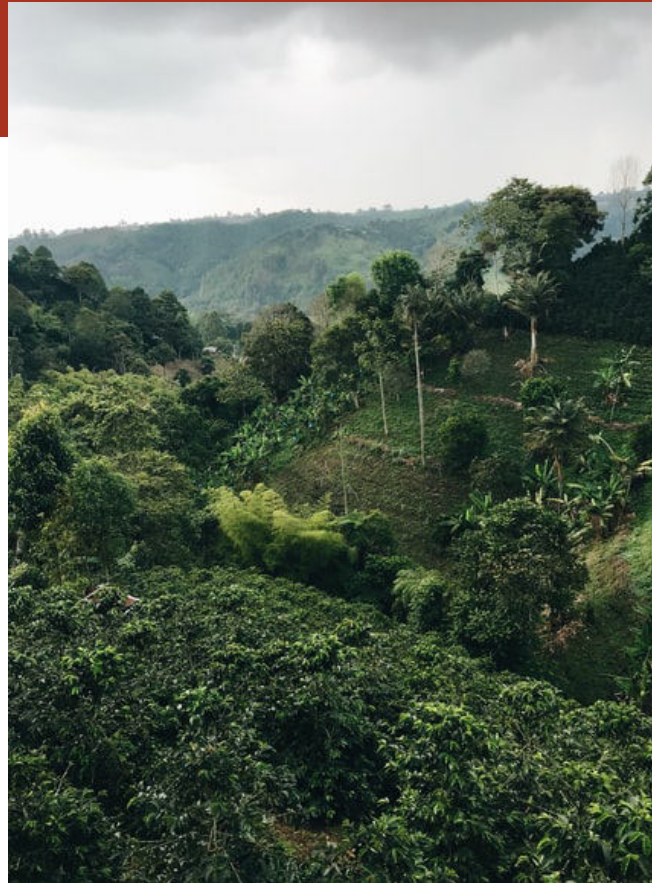
is considered a speciality coffee. The important thing is: a coffee should always develop and always be delicious, no matter with what temperature. Coffee is sweetest at 42 degrees, because then you can no longer taste the bitter substances. Speciality coffees do not necessarily have to be organic. A big problem with organic certification is that it is relatively expensive. Small farmers cannot afford the label, even though their farming methods would meet all the criteria.

Geisha coffee does not come from Japan

Britta's personal favourite coffee is Geisha coffee. It is grown in Panama and Peru and is one of the most expensive coffees in the world. What makes it so special is its unique combination of aromas with sweet and floral nuances. Many people only know the two best-known coffee varieties: Arabica and Robusta. However, there are many crossbreeds, and the coffee beans are very different depending on the location and the plant. When Britta prepares a Geisha coffee for herself on rare occasions, it is something very special for her.

The legendary bean

When Britta had to travel back to Germany due to the Corona Pandemic, she started a small coffee business, reselling coffee from a coffee farm in Colombia directly to her network at home. When that became too much work, she decided to once again apply for a job at a Café. Kaffee Pura is the name of the shop where she still works today, selling Ethiopian speciality coffees. Britta tells us that there have been writings about coffee since the end of the 10th century! The cradle of coffee is in Ethiopia and from there the precious bean only reached the Arab countries in the 12th century. As there is a ban on alcohol there, coffee quickly became a popular drink for the upper classes and a drink for scholars. It is said that people met to



philosophise in large discussion groups, and coffee was served along with it. However, there was a problem. The fruits, which according to the myth kept people awake all night, did not survive the long journey across the sea. Therefore, the entire plant had to be shipped: the "coffea arabica" was given a new home in the terraces of Yemen.

Labour Struggle in Capitalism

In Colombia, most coffee farmers are part of the Federación Nacional de Cafeteros de Colombia, an association of coffee farmers. If you want to put your coffee in the supermarket, you first have to go through the Federación. In Colombia, coffee farmers with small farms or plantations have no chance of surviving outside the Federación, unless they have a direct deal



with a café or a roastery. In the past, profit was distributed even more unfairly. People were paid per kilo or for each coffee bag filled to the brim; there were no hourly wages. Women made slower progress with the heavy physical work on the steep slopes in the blazing sun and received correspondingly lower wages, and had to harness their children in order to survive. Although the Federación has done many things better and try to negotiate fair wages and better working conditions, they are also tied to global market dynamics. That is why, despite all their efforts, small women coffee farmers are falling behind. The price for the raw beans is cheap, but the value added through roasting happens almost exclusively in the importing countries.

Climate change on the heels

There are other challenges for the people who work directly with the coffee cherries. The effects of climate change are already being felt in the growing areas of Ethiopia and Colombia. In recent years, many losses have been recorded in the growing areas due to extreme weathers. Therefore, local initiatives are trying to promote variations in coffee plants and thus make the growing areas more resistant to climate change. In addition, many original coffee plant seeds are stored in so-called seed banks to preserve them for posterity. However, current projections already show that it will no longer be possible to grow coffee in certain regions in the future, because the coffee bean needs a cool climate that should not exceed 25 degrees Celsius.

Fill up the tank and cup please

According to Britta, most of the population in Colombia drinks really bad coffee. The general population is not interested in speciality coffee and many drink the cheap coffee that is not exportable. Since it is a huge commodity, coffee is just always available everywhere. For example,

when you fill up your petrol tank, you get a coffee for free, just like that. Coffee is also omnipresent because everyone knows someone who works directly with coffee, has a grandmother who owns a coffee farm or lives right next to a plantation. In Colombia, people don't meet to drink coffee in cafés, but rather at home; the drink is consumed collectively. In Germany, hardly anyone has direct contact with the coffee value chain, but nevertheless it is impossible to imagine people's everyday lives without the drink. People meet friends in cafés, need coffee to wake up and to function. According to Britta, consumption in Germany is much more casual but also more excessive.

A bean for all

Finally, one area that concerns Britta and that she reads and thinks about a lot is gender inequality in the coffee sector. Menial tasks such as picking, the first steps in production, are done by women but the trade, the business side, is in the hands of men. In general, the coffee industry is very male-dominated. In addition, women are involved in care work at home, responsible for children and household and help in agriculture. Everything beyond that is taken care of by the men. Women take the first steps, the value creation happens much later. Britta supports the Women in Coffee Alliance, whose mission is to empower women in the international coffee community to create meaningful and sustainable lives for their families, and to promote and recognise women's participation in all aspects of the coffee industry. Take a look at the website:

<https://www.womenincoffee.org/>

Otherwise, you can watch Britta make coffee on Kaffee Pura's Instagram account:

<https://www.instagram.com/kaffeeapura/>



COFFEE AND FAITH



With the help of a former roommate from Colombia, Matthias arranged to meet Fabio Valenzuela Artunduaga, a Catholic priest who runs his own small coffee brand. He lives and works on his finca "La Primavera" near the village Saladoblanco in the department of Huila, Colombia. Don Fabio is a busy man. He does not currently lead a church congregation, but he still holds services from time to time. His main focus at the moment, however, is coffee.

During the call, Fabio films the coffee beans, which he is drying, and a few small coffee plants. Suddenly, he is visited by friends who come over to enjoy his coffee and have a chat.

Coming from a family of coffee farmers, he has the opportunity to run a coffee plantation and carry out the entire process from plant to cup himself. In his fields grow the varieties Arabica, Variedad Colombia and Geisha. He sells the roasted coffee, as well as "panderos," a type of cookie made from yuca starch, in his own small store in the nearby town Pitalito, as well as at a stand at the airport. This allows him to employ four people in the store and ten on the small farm, with the number of employees increasing significantly during the harvest season.

"Es un producto de la canasta familiar"

Don Fabio also mentions how important coffee is as a consumer and cultural good for the Colombian people. Like him, many people come from "coffee families" or depend on the work on the farms and the coffee trade. Currently, he notes that the demand for Colombian coffee is enormous. At the moment, he says, one is noticing the high prices of raw materials on the one hand, and on the other hand the increased transport costs since the start of the Corona pandemic. In order for the coffee industry to become more sustainable, better payments for those at the beginning of the supply chain, i.e.



© Fabio Valenzuela Artunduaga

pickers and farmers, would be important, as well as reasonable coffee prices when the consumer comes into the picture. For example, he believes that government subsidies would improve the situation. He further praises the work of various organizations that advocate, for example, for women's rights in the industry.

"No tengo fronteras con mi café!"

Although Don Fabio's company is rather small, he does not have any limitations for the distribution of his product. He now sells coffee to Mexico, the United States and Germany. In Rochester, Minnesota, he will give a barista course soon. For the future of his business, he hopes to be able to sell his coffee specialties on an even larger scale, and thus hire more people.



A GOOD EXCUSE FOR EVERYTHING

Jose Miguel Mostacilla comes from Popayán in the province of Departamento de Cauca in Colombia. He is currently a doctoral student in Electrical Engineering at a university in San Juan, Argentina. We spoke with him because he originates from a small family business for coffee production. His family runs the company Café Rico, which has existed for more than 50 years and roasts, grinds, packages, and trades coffee for the domestic market.

The company's history

Jose's great-grandfather bought the coffee company Café Rico in 1967 from a man named Roberto Rico. Since that year, the plant was moved from its original location to the centre of Popayán, where it is today. Little by little, the equipment was renewed. At the International Fair in Bogota, his great-grandfather bought new machinery to replace the factory. Thus, he replaced the coal roaster with a gasoline roaster, which allowed him to improve production, around the mid-1970s. At the same time, the paper packaging was changed to polypropylene, and now metallized packaging is used. Since then, it has been a family business, gradually selling more and more coffee, not only in the headquarters, but also in several supermarkets in the department and in small stores. With

With the death of his great-grandmother, who managed the factory after the death of the great-grandfather, two cousins are in charge of the factory, the distribution and the sale of the coffee. They set a new goal for the company: to grow the business and make it biologically sustainable.

The region

In the Cauca region, Arabica coffee and the Variedad Colombiana are sold. Arabica is considered to be of particularly high quality, but due to its plant's size it is also difficult to grow and is thus mainly grown and harvested for export. The Colombian variety is easier to care for, grows much lower, and is therefore particularly popular domestically because it makes it easier for Colombian or Venezuelan coffee farmers to harvest coffee, as people are often not as tall as in Europe. In addition, there are various coffee farmers who try their hand at varietal "Café de Origen", or "origin coffee". These are also mainly intended for export, and attempts are often made to become better known locally and internationally with these varieties. Next to the different varieties, coffee is also divided into quality grades. In descending order, these are called "alto", "nacional", "pasilla", and "ripio". Again, the highest quality beans are mainly exported. Beans of

the "pasilla" and "ripio" grade are coffee of inferior quality due to breakage, which can still be used as raw material for soluble coffees.

The coffee

Café Rico sources its raw materials indirectly through the Cooperativa de Caficultores del Cauca from traders in the region. Jose mentioned that working conditions for coffee farmers are still sometimes difficult to precarious. In the absence of money and resources, even very low wages are accepted by the harvesters. There are various organisations that campaign for rights and working conditions in coffee cultivation. The coffee is roasted and ground in the small factory. The coffee is sold for domestic consumption in various presentations. Very popular are, for example, "papeletas" in different sizes, which are poured over with hot water similar to tea bags. But ground coffee for a filter coffee or for moka pots is also very popular.

Sustainability

In terms of sustainability, Jose could not name any major changes in Colombia, apart from changes in roasters and packaging. The most noticeable changes, he said, are in costs and in the world market. Now, especially "origin coffees" and organic varieties are popular and expensive. In terms of sustainability, Jose could not name any major changes in Colombia, apart from

changes in roasters and packaging. The most noticeable changes, he said, are in costs and in the world market. Now, especially "origin coffees" and organic varieties are popular and expensive.

Coffee in everyday life

For José himself, who grew up with coffee, the hot drink has enormous significance. It reminds him of his childhood and is considered a "good excuse for everything". However, he says it can be observed that coffee is becoming less important for Colombia's younger population. This is particularly exciting when you consider that Colombia is one of the three largest coffee exporters in terms of volume.



© Café Rico Popayán



BEANS IN BABA BUDAN'S BEARD

Mounika Gowda's parents grow coffee in the town of Gonikoppal in the Kodagu district of the Indian state of Karnataka. Unlike most of the other farmers we spoke to, they focus mainly on robusta coffee. Coffee was brought to the regions that are part of what is now the Federal Republic of India in the late seventeenth century. Mounika tells us about a legend from the region that explains how the coffee production once started.

The Secret Mission

An Indian pilgrim named Baba Budan, smuggled seven coffee beans from Yemen back to India in 1670. He returned from his Hajj, an annual Islamic pilgrimage. At that time, coffee was exported in roasted or baked form to other parts of the world, so nobody could plant the seeds in the soil to grow coffee plants. Baba Budan is said to have chosen to smuggle exactly seven coffee beans because it is a holy number in Islam. At that time, it was illegal to take coffee seeds out of Arabia, so Baba Budan hid the beans in his giant beard. He is said to have planted the seeds in the Chandragiri hills of Karnataka. This range of hills was later named after him as Baba Budan Hills (Baba Budangiri), where his grave can be visited on a short drive from Chikmagalur.

"Baba Budan's real legacy, however, lies in our cup: every time we enjoy our espresso, we must not forget that one of our beans is perhaps the distant offspring of a bean hiding in the beard of an ambitious monk for almost 6,500 kilometers!"

- Coffees.gr

Although this idea is strongly tied to a centuries-old legend, it is worth remembering more often how many kilometers each coffee bean must have traveled between plant and cup.



In recent years, climate change has directly impacted Mounika's family's business. Due to uneven rainfall, they have not been able to harvest the expected amount of crops. This is especially problematic since the area is only suitable for coffee cultivation. Since they usually sell their raw materials directly to local coffee traders, they have had to forgo income in recent years.

"...he quit drinking coffee, and

naturally his brain stopped working."

– Orhan Pamuk, *My Name Is Red*



BEAN OF WONDERS

Laura Kuen is 28 years old and a PhD candidate at the Institute of Ethnology of the Czech Academy of Sciences in Prague. She is currently doing field research in Ukraine in the Transcarpathian region and lives in Uzhhorod. Previously, she worked as a staff member for the exhibition "Kosmos Coffee" at the Deutsches Museum. In the interview, she tells us a lot of interesting facts about the miraculous coffee bean.

The coffee exhibition Kosmos Kaffee at the Deutsches Museum featured the world's smallest coffee machine, which only ever produces one drop of coffee. It was exhibited next to the 20,000-euro, gold-plated Gothicism coffee machine, which also produces only one (cold) drop of coffee after hours of work. What Gothicism can do sounds disappointing, but the way the luxury coffee machine looks is overwhelming. In the exhibition, Gothicism was strategically placed opposite the section dealing with coffee and slavery - to show that the subject of coffee never has just a way of looking at it. In addition to unusual items, the exhibition also teaches visitors all kinds of things about the coffee plant. Coffee rust, for example, almost killed the coffee plant several times in history. It is a pesticide attack that causes the leaves to wither. In Sri Lanka's region Ceylon coffee is no longer grown and is instead known for the famous Ceylon tea because they could not cope with coffee rust. Some of the coffee facts from the exhibition are so astonishing that you cannot get them out of your head. For example, people in Germany drink more coffee than water, tea or beer. "Kosmos Kaffee" is about the biology, chemistry, technology, economy and culture behind the coffee plant. It takes a look back into history, to the time when water girls still worked in the coffee shops in Munich, who brought the guests a glass of water alongside their coffee cup

and earned the least of all the employees. The exhibition spotlights the colonial heritage of coffee cultivation and the connection between coffee and slavery. When the history of coffee and its importance are closely examined, the topic can function as a mirror of society. What is particularly important to Laura Kuen when it comes to coffee: "You must never forget that even if you buy the best organic coffee for home today, which is based on fair working conditions and low-impact cultivation, you haven't directly done anything good. The most sustainable thing is simply not to drink any coffee at all, so less consumption is actually always the best thing."

The black magic potion

Coffee once came to Vienna via Turkey during the Ottoman Empire and from there to other European cities. In Europe, only kings were allowed to drink coffee at first, and the black drink was even used as a medicine. Like cocoa, coffee was a typical colonial commodity and particularly valuable because it came from so far away. To emphasise the special luxury and to use the commodity sparingly, coffee was only consumed on Sundays. However, there was also a lot of scepticism about coffee in the beginning. Gustav III wanted to know if coffee was more harmful than tea and forced two twins who were condemned to death to drink a lot of coffee and a lot of tea every day. He wanted to see what effect this would have on their health. The two are said to have grown far older than the king himself. In the past, there were also myths about coffee, proclaiming it made men impotent and women wither inside. In the so-called Women's Petition Against Coffee, women campaigned for their husbands not to sit in the coffee houses so much and spend more time at home with their families. Today, coffee is often credited with miraculous effects. There are anti-ageing creams

or shampoos with caffeine against hair loss, or coffee is simply drunk as a concentration booster.

What once was and once will be

In advertising, naked women's bodies often present the sensual coffee product - and loll in beans. An advertisement from the 1950s shows a man putting his wife over his knee, obviously about to start beating her. Above the picture is written "If your husband ever finds out you're not 'store-testing' for fresher coffee". Other ads exoticise women, showing them in raffia skirts on the beach serving a cup of coffee to lucky tourists. Advertising, says Laura Kuen, shows us what was once socially accepted and what coffee was and is associated with.

Drug of industrialisation

As a plant, coffee can be viewed from so many disciplines. It is globally relevant and shows commodity flows, explains a lot about what makes our world, how it works, what unites it. You can understand so many issues, learn about so many aspects, if you try to understand coffee from different angles. We humans have an emotional relationship with coffee, looking forward to a hot cup that heralds a break from everyday life and at the same time structures our day. On the one hand, coffee is known as a slowdown, an outdoor leisure drink consumed in Italian cafés, for example. On the other hand, coffee is an efficiency enhancer that keeps us going late into the night. Coffee kitchens are known as social places. At the latest since the beginning of industrialisation, coffee has become a drink consumed by the general population. The coffee industry told factory owners to serve coffee to their workers so that they would work better, increase their efficiency and eventually the factories profit. Until then, workers had often eaten beer soup before their shift. With the increasing use of dangerous machines, there was an interest in sobering people up before the beginning of the working day. Since then, coffee has also been seen as a soberer, the opposite of alcohol, a kind of substitute drug that has driven industrialisation.

Trembling coffee and Erich's booze

Coffee also played a crucial role during the great wars of the last century. During the Korean War, American soldiers were always served doughnuts and coffee free of charge as a mood booster. In World War 2, coffee was supposed to spread warmth and comfort in extreme situations and signal that things were not so bad, to calm the nerves. The so-called trembling coffee was boiled in large pots in the street and served to people sitting in front of their bombed-out houses at the end of the war. In the GDR there

was then a shortage of coffee, which caused great resentment among the population. When people from the West sent coffee to people in the East, a well-known saying was: "please send two packs of Jacobs Krönung instead of Erich's Dröhnung" (=Erich's punch). In post-war Germany in the West, people were drinking filtered coffee, showing that they could afford something again, that they were doing well because they had coffee. This is closely connected to the so-called "feeding frenzy". Today, the craze for coffee has also long since hit Asia. Starbucks branches can be found in all major cities across the continent and coffee shops are displacing traditional tea houses. The coffee shops are becoming popular coworking spaces where the digital new generation of workers linger for hours with a giant cup after finding a wifi hotspot and a power socket.

The new SUVs

According to Laura Kuen, the new hype around portafilter machines in one's own home can be compared to a new sustainable alternative to ostentatious sports cars and massive SUVs, which trigger great enthusiasm and status awareness, especially among young men. The coffee machines can be perfectly adjusted, the coffee powder precisely weighed, and there are countless explanatory videos on YouTube on how to use them correctly. Those who insist on the environmental aspect and don't want to drink bad capsule coffee should remember how much aluminium is in a large portafilter machine, not to mention the energy needed for production and for each heating-up so that there is enough steam and pressure. Moreover, a small Nespresso capsule contains only 3 grams of coffee powder. The best thing, says Laura, is to stick to the classic filter or the Turkish way of making coffee: pouring it on.

Abundance

Another obscure thing about coffee is patents. A man once took out a patent on coffee cup sleeves that are supposed to protect you from burning your fingers. The pile of rubbish that coffee-to-go cups cause to grow every day is made even bigger by the cardboard sleeves. For us, it is the most normal thing in the world to drink a coffee in the morning, but few people think about the fact that the coffee plantations on which the raw material for their breakfast coffee grows are in direct competition with the rainforest. Climate change is reducing the number of tropical regions where coffee can be grown. Actually, there are many wild bean varieties besides Robusta and Arabica, but due to breeding and cultivation, the genetic diversity has become smaller and smaller, as with maize or

bananas. In this context, one speaks of the Plantationocene*.

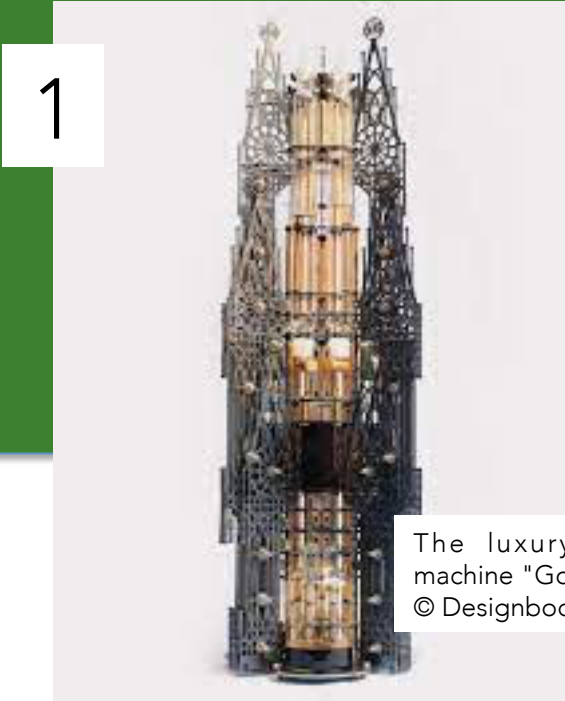
Tea is just water with flavour

The reason why the coffee plant produces caffeine is that it wants to protect itself against predators with its neurotoxin. It is comical to think how successfully coffee has spread around the world despite this fact. There are so many different interests behind the coffee plant and yet: at first the liquid tastes bad, bitter, until a person once gets used to the taste. Coffee can be taken like a proper meal, with milk, sugar and biscuits to go with it. Many people also associate coffee consumption with doing something good for themselves, like eating chocolate, a reward, an act of self-love. In everyday life, just stopping for a moment and saying: I'm going to make myself a nice coffee. Tea has lost the race there, statistically speaking, tea is almost not drunk at all in Germany. This is also evident on the menus in cafés and restaurants. Tea is often listed a little uncharitably on the menu, the variety is reduced to black, green, herbal and fruit teas and preparing it usually means pouring hot water from the coffee machine onto a tea bag.

If you're craving more curious and fun facts about coffee, you should read the exhibition catalogue of "Cosmos Kaffee"!



2



The luxury coffee machine "Gothicism"
© Designboom

*In a recorded conversation for Ethnos at Aarhus University in October 2014, participants collectively named the Plantationocene for the devastating transformation of various types of human-managed farms, pastures and forests into extractive and closed plantations that rely on slave labour and other forms of exploited, alienated and mostly spatially transported labour.



Native forests all over the world are cleared for vast of a single species, as it happens with coffee plants.
© The Architectural Review

Sexist coffee advertisement from 1952
© Chase & Sanborn

"The fresh smell of coffee soon wafted through the apartment, the smell that separates night from day." - Haruki Murakami, Tsukuru Tazaki and his Years of Pilgrimage



BACK TO THE ROOTS

Ethiopia is considered the cradle of coffee. The East African country has enjoyed the taste of the noble drink for about six centuries. According to legends, the taste and effect of coffee cherries were discovered by accident. Two goatherds are said to have seen a flock of goats eating the red berries from a certain bush, alive and moving all night. They took the berries to a monastery and asked the monks to examine them. Only when they put the beans close to fire, they noticed their fragrant smell. They took the roasted beans, crushed them and poured hot water over them. This is how coffee was discovered, coming from a region in the west called "Kaffa". In Ethiopia, more than 15 million people earn their living from coffee. Fair trade in coffee plays a central role in the country's economic development.

We met Markos Gebreselassie, the founder of the brand "Coffee Pura" for an interview. He told us how he got into the coffee business, shared stories from Ethiopia and talked about his ideas of a sustainable coffee trade.

Hi Markos. How did your specialty coffee roastery come about?

During my studies in Giessen, I dealt a lot with entrepreneurship. In one course, our task was to plan a business start-up. In my diploma thesis, I further researched on entrepreneurship, for example with common obstacles. Among other things, I surveyed about 500 Ethiopian students about their attitudes. Here, the frequent feedback was that they would like to start a business, but do not have the financial means and do not receive any financial support. After my diploma thesis, I decided to found a company that would start directly from my roots. Coffee is the backbone of Ethiopia, and the idea was simply to import the country's most important commodity directly, process it purely and sell it.

What does coffee mean to you culturally?

My family never owned a coffee farm or anything. But like most Ethiopians, we held a coffee ceremony every day. This is deeply rooted in the traditions and every child gets to experience it. It's a ritual where coffee is celebrated and drunk in peace and friendship with guests. It is an important part of the culture.

We heard from Colombia that coffee is losing importance among the young population. Do you feel such changes in Ethiopia as well?

Today, the ceremonies no longer take place exclusively within one's own four walls, but also in public places such as shopping malls. However, the coffee is also freshly roasted, ground, and celebrated. In rural areas, coffee is still the center of all life and the ceremonies here are often as I know them from my childhood. In general, a further development is visible here, but this important commodity is by no means extinct.

Now let's talk about the cultivation of the raw material. How much does coffee cultivation shape the Ethiopian landscape?

Coffee cultivation hardly shapes

the landscape, but that makes the coffee very special. Ethiopia is a mountainous country with unavoidable landscapes, many forests and mountains and few roads. Even nowadays it takes a lot of time to reach places, because it is partly only accessible by donkey. From a business point of view, the productivity of coffee in Ethiopia is poor, because the cultivation is very natural. Only about five percent of the coffee is grown on plantations. The rest is grown in the jungle, in "semi-forests" or in gardens. Here, isolated coffee plants grow in the shade of huge trees together with other plants such as corn, potatoes, fruit, and spices. This is what gives Ethiopian coffee its spiciness and aromas, but also makes it more expensive.

So, there are few commercial plantations. How can one imagine the work of a coffee picker?

In contrast to plain regions where you can harvest easily, maybe even by machine, the work is of course very intensive. It should also be noted that in this wild form of cultivation each tree is different. Some grow up to six meters high. This, of course, changes the work a lot.



BACK TO THE ROOTS

In most coffee growing countries, the best quality coffee is grown exclusively for export. How is that in Ethiopia?

There are legal requirements that the absolute top coffees must be exported. But I doubt that this always happens. There is also a lot of very good coffee domestically, which is by no means cheap. About half of the coffee produced is consumed in Ethiopia.

So, the cultivation is much more biodiverse. Are there other impacts on nature and the population?

You can't simplify this. There are many regional influences and impacts. Ethiopia is a huge country. There are special occurrences in all regions. In the regions of Sidamo or Yirgacheffeim, in the central south, there are many varieties. In the Bonga Forest, near the city of Kaffa, there are ever-green mountain forests with wild Arabica coffee, which are also home to numerous rare animal and plant species. In the east, in the region of Harar, it is very dry, one may hardly believe that excellent coffee grows there as well. The conditions are so harsh that many farmers switch to other products, such as the Qat bush, from which a popular drug for the Arab region is produced.

It seems to me that there are already big differences here compared to other coffee-growing countries. Can you still see the global trend towards sustainable coffee?

Fortunately, the initial situation

here is already comparatively sustainable. Due to the still "low development" of the country, there is, apart from Addis Ababa, less pollution and better air. This also applies to coffee cultivation, which is still very traditional. Of course, for other areas of life, there is still much to be done here. Not everything is balanced, and we still must see how natural resources will be used in the future as the population grows.

What impact do you think you're having with your direct trade business?

In collaboration with cooperatives and trade unions, we are already bringing new points to the table, such as the reduction of transport journeys, the water-saving processing of coffee cherries, or the reuse of coffee residues for briquettes or animal feed. There are many ideas here, but they also mean a lot of work. For big changes, the will of the entire population is needed, and we as small businesses are not enough. Fortunately, the Ethiopian government is currently doing a lot in terms of reforestation, green spaces, and resource conservation.

Can you tell me something about the "Roasted in Origin" idea?

Before Kaffee Pura was founded, there was the idea of having the coffee roasted in Ethiopia and exported ready-made to Germany. The idea behind this is to have the added value take place to a greater extent in the country of origin

and to provide the Ethiopian population with market access. At that time, there were still far too many things standing in the way of this, such as the lack of expertise of the local packaging industry, transport routes that were too long, price issues, customs duties, taxes and so on. In the meantime, the idea has evolved, and we have some smaller roasters in Ethiopia who are showing great interest. They may not be able to sell huge quantities, but at least they have market access.

Is it also evident with your customers that they value origin and quality?

I think that our customers come exclusively for the quality. People are happy to pay a little more for such good coffee. If they didn't like it, they probably wouldn't buy it.

But the basis for our excellent coffee is also our willingness to pay good prices to the farmers. While other traders negotiate prices, I go there, tell them that I would like to have the best coffee and then pay the appropriate price for it.

What is your wish for a more sustainable coffee industry and what is your wish for the future of Kaffee Pura?

Of course, sustainability will be increasingly in focus in the future. We are already considering how we can optimize processes, use less waste, and reduce our transport routes. We have many wishes for the future, but we are grateful for all customers who appreciate our products.



Markos Gebreselassie with two of his employees on a coffee fair.



Fresh coffee bean bags from Ethiopia.



The red coffee cherries are freshly harvested.



The correct roasting and grinding of coffee is a science in itself.

The Ethiopian Coffee Ceremony

As Markos Gebreselassie explained earlier, the coffee ceremony is an important part of coexistence among Ethiopians and a very pleasant way to "waste time". It brings people together and represents enjoyment and relaxation. The process is explained in more detail on the Coffee Pura website.



"The coffee ceremony is used to honour special guests, celebrate ceremonial occasions, or simply celebrate a gathering of friends. Being invited to a traditional coffee ceremony is a sign of respect and friendship. A little time should be allowed for the ceremony, as three cups are usually drunk. Declining an invitation is considered very rude."



The ceremony begins with the washing and careful roasting of green coffee beans on an open fire. The freshly roasted beans are hand-ground with a coffee grinder. It is then brewed with hot water in a jebena, a traditional Ethiopian coffee pot made of clay. The finished coffee is then served in small porcelain bowls. The freshly brewed coffee is usually drunk black with plenty of sugar. Along the way, there are small snacks and the smell of incense.

The detailed description, as well as an explanation video can be found here:

<https://www.kaffee pura.de/kaffeezeremonie-aus-aethiopien>

<https://www.youtube.com/watch?v=oxFzJEeUdUA>



The Third Wave of Coffee

Evi Mariana is a PhD candidate with the international PhD Program for Agricultural Economics, Bioeconomy and Rural Development at the Justus-Liebig-University Giessen and the University of Hohenheim. The Program focuses on interactions between environmental, social and economic dynamics and where values play an important role. Evi is researching on coffee value chains in Indonesia.

Evi comes from Temanggung province in Central Java, Indonesia. From there, it is two hours to the nearest major city, Yogyakarta. Although there are other coffee growing areas in Indonesia such as Aceh, Sulawesi or Bali, Evi chose to do the field research for her doctoral thesis on the so called "third wave of coffee" in her home region. "It is then easier to talk to the people, understand them and build trust with them," she says. In Temanggung, many families make a living from growing coffee, then everyone helps with the cultivation, harvesting and processing. Evi went there for the first time last autumn and for the second time she will be there in the summer of 2022 in July, August and September to witness the harvest and to see how the farmers negotiate with the middlemen to sell the coffee beans.

The coffee waves of history

Coffee waves are movements or coffee trends that have developed over time. They have to do with, among other things, the coffee business itself, the bean quality of the coffee and its origin, or the production. Simply put, the three waves of coffee represent how accessible or appreciated coffee was at certain points in time: the first wave represents the transition from novelty to a (mass) commodity, the second wave represents the transition from commodity to coffee culture, and the third wave represents the transition from coffee culture to consumer awareness.



1st wave, end of the 19th century: from novelty to (mass) commodity

The first significant change in the history of coffee takes place during the 19th century when coffee becomes a globally known commodity with high commercial value and economic weight. At this point, the general public begins to buy coffee regularly to consume the drink at home. The coffee industry is born in the first coffee wave. The most visible consequence of this first coffee wave is the appearance of a variety of products on the market that are still successful today: soluble coffee, vacuum-packed coffee packages and so on. It should be noted that until then coffee was simply consumed in large quantities as a raw material.

2nd wave, around the 1970s: from mass commodity to culture

The second coffee wave is usually associated with the appearance of Starbucks and the revolution brought about by the breakthrough of this American coffee chain. First, this change is more appreciated in the United States, but as the years go by and globalisation takes over, the effects are seen all over the world. The customer is educated about quality coffee, the

origin and the types of coffee. Until then, these parameters went completely by the wide public unnoticed. The consumption

3rd wave, beginning of the 21st century: From culture to consumer awareness

The third coffee wave of coffee is on-going, as we are experiencing it right now. The decisive moment is when the domestic consumer, the general public, begins to appreciate quality coffee, to look for it in shops and to find out about the origins and varieties to which they have access. It is an increase in the profile of consumer demand and also that the industry itself is enabling that increase. Indulging the customer, providing information and creating a

to harvest, how the coffee beans should be processed and much more. Many watch Youtube videos or read up on their knowledge in internet forums. To produce better quality means to undertake a longer and more complicated cultivation process, it is not easy to find buyers that make transparent where the coffee is shipped to, that pay fair wages along a short value chain or even include the farmers in the process. This is the reason why many farmers still sell to the biggest middleman in the region that offers little but fast money and is an already established point of contact. Furthermore, the market for third-wave coffee is still very small and new challenges are emerging.

1st Wave
19th century

2nd Wave
70s of the
20th century

3rd Wave
Start of the
21st century

story around the grain that is used in production. How was the grain processed? When was it roasted? Which farm did it come from? Also, terms like speciality coffee, roasting, bean types, aftertaste or the coffee process are important, which decades ago were completely unknown to the local and domestic consumer.

Not everyone can surf the wave

In her thesis Evi is writing about how the third wave is affecting the livelihoods of coffee farmers. She also compares the pay and living conditions in the first, second and third coffee waves, using both quantitative data collected over the last decades, with which she calculates costs, and qualitative interviews. Although the coffee waves cannot be precisely separated in time, there is enough evidence to attribute a specific value chain to a particular wave. According to Evi, the third wave has had a very positive impact on coffee farmers. They have a



Woman selling her produce
on a market in East Java
© Anggit Rizkianto

higher income and knowledge is transferred between the roasters and the farmers. Evi has also observed that more and more farmers are trying to teach themselves about the right time.

Falling flowers

In recent years, production has been rather fluctuating to declining. Old plants have to be replaced by new ones, but these take 8 years to bear fruit. Climate change is also causing problems for the farmers. There are more and more extreme weather events, a lot of wind and a lot of rain, even outside the rainy season. As a result, the flowers of the coffee plant fall off and no coffee cherries can form. Especially in the last three years, the effects of climate change have become more evident in Temanggung. Another problem are chemical fertilisers that are added to the soil and prevent enough water from being absorbed by the soil. Coffee grows well at high altitudes; especially Arabica should be planted in the mountains. Evi has already spoken to 225 people. She has heard from all of them that 2021 can be considered the year of the lost harvest. They explain that the harvest has been so bad because the weather has changed so much and the plants cannot thrive in the changed conditions. Some have only harvested 20kg of coffee cherries, an amount that is not worth selling and that they simply consume themselves as a family throughout the year.

Making ends meet

Coffee farmers do not only sell coffee as their only product, fruits, vegetables and tobacco are also part of the family farms' products. Tobacco cultivation is also becoming increasingly difficult and the farmers are worried about their future and whether they will still be able to support their families in the coming years. The Indonesian state lets the farmers rent the land and gives them half a hectare per person for which they have to pay a rental fee. Temanggung is actually a protected area, but this kind of small-scale farming is still allowed. Most coffee farmers still sell to the big buyers and do not know where their coffee will be consumed because the value chain is too long. Many sell their cherries to middlemen, who in turn sell to even bigger middlemen at district level. As touched upon earlier, they do not process their products themselves because they lack the knowledge and equipment and need the money immediately. During the colonial

period from 1596 to 1949, when the Dutch oppressed the Indonesians, farmers were forced to grow crops that were useful to the Dutch. Coffee could be sold at a profit and so Indonesians were forced to slave on Dutch plantations to make a profit for the colonial masters.

It remains to be seen how the living situation of the coffee farmers will change. For the better because of their creativity, the new appreciation for good coffee and short value chains, or for the worse because of the challenges of climate change and competition from cheap coffee products on the world market?

Top 5 Coffee Producing Nations

1. Brazil
2. Vietnam
3. Colombia
4. Indonesia
5. Ethiopia

“Even bad coffee is better than

no coffee at all.” — David Lynch



Villemo Karnström – Slowing Down

Coffee in Sweden is served very strong and it is a very big part of Swedish culture. Especially something called "Fika" is important to us. It is a cultural concept, something we do to slow down, spend time with the people with love. We meet and have a coffee with some sweets next to it, most commonly a kanelbulle, a cinnamon bun. We are among the countries that drink the most coffee, along with a lot of other Nordic countries. Even when my grandpa and grandma were young and you visited someone else's house – the custom was that you always needed to have some coffee and pastry to serve to them. To show your hospitality. So basically, you always need to have a "Fika" at home. Nowadays we also say "Let's go for a Fika" and it means to go and get a coffee.



Duygu Er – Salted Coffee

Coffee in Turkey is simply everywhere. The Turkish word for breakfast is "kahve altı" and translates to "before the coffee". This means that the actual meal is unimportant; you eat breakfast so that you can have your coffee afterwards. When a woman gets engaged, the groom's whole family comes over. In the evening, the bride-to-be prepares coffee, which is such an important tradition that new coffee sets are often bought especially for the occasion. To prove to the new parents that she is a good housewife, she prepares delicious coffee for them. The husband though, is given coffee that tastes awful, in which for instance salt has been added. He then has to pretend that it tastes wonderful and praise her, to show her his great love and because he can't say anything bad about her in front of his parents. Because he wants to marry her. Traditional Turkish coffee is made over a fire, but it can also be made on a gas cooker. Freshly ground coffee powder is poured over cold water and then slowly heated.



Luiza Monteiro – Coffee in the Morning

I'm not that much of a coffee lover myself. When I tell someone in Germany that I don't like coffee, they often say, "That's strange! You're from Brazil! We are the biggest coffee exporter in the world, which means that most of the coffee doesn't stay in our country. I have the feeling that young people in Germany drink more coffee than young people I know in Rio. I rather remember it from older generations, from my grandma, that people make coffee at home. My mum says coffee is something that connects. So in every little village you will find someone drinking coffee on every corner. According to my grandma, coffee is the occasion for people to take a break and come together. By the way, the Portuguese word for breakfast is "café da manhã" and means: coffee of the morning.



Laura Anh Thu Dang – A Sweet Amusement

Coffee came to Vietnam in the wake of French colonialism. You can still hear this in the language: Cà Phê is pronounced quite French. Vietnam is the second largest coffee producer in the world due to the good climatic conditions in the highlands. Now, with climate change, the temperatures are actually too hot in some regions. In Vietnam, drinking coffee is always a social event. People get together, drink coffee and talk for hours. This can happen in the morning, at noon and in the evening. A very popular coffee drink is Cà Phê Sữa Đá. It is a type of filtered coffee with sweetened condensed milk and ice cubes. It requires a Phin filter, in which the coffee is pressed firmly and then infused with hot water. In the cup, you then mix the coffee with the condensed milk and add ice cubes. Personally, I do not drink a lot of coffee, but especially in summer, it's nice and refreshing





Transparency and Appreciation: Specialty Coffee for All



In Munich's Sendling district lies the small but fine roastery Pacandé. Pacandé is the name of a legendary small, pointed mountain in the Colombian southwest. Through the shop window you can already see the mighty roasting machine. Inside there is just enough space for the sale of Colombian coffee specialties and a single bistro table with stools. As you enter the small store, the smell of freshly roasted coffee wafts around you and in the background, you can hear the sounds of "Buena Vista Social Club". We are in the realm of the owners Ana and Andreas Schmitz. Ana comes from Colombia and used to work as a copywriter. Andreas is an electrical engineer. In the interview with Ana we talk about Colombia, coffee farms and sustainable, specialty coffee.

Hello first, nice to be here. Please give us a short introduction of your company.

We are here in our coffee roastery Pacandé. We focus on Colombian specialty coffees. To do this, we've been doing direct trade with Colombian coffee farmers for the past three years.

How did you come to open your business?

I used to be a copywriter by profession. Having already tried to get a foothold in the coffee industry, I also thought I would like to pursue a meaningful job. At that time I fell in love with specialty coffee and I thought it would be nice if really good coffee was available more often at a reasonable price. That's how the coffee roasting idea came about. For my husband as an engineer, this was also very exciting. After we found out by chance that many coffees from the Huila region, where my family lives, are sought after and popular all over the world, we thought that all the prerequisites were given to start the project. So, we searched locally for the first coffee farmers and opened our roastery.

How did you proceed in order to reach the Colombian coffee farmers on site? Do you have acquaintances in the industry there?

Of course, simply going to Colombia and getting coffee is not as simple as that. The supply chain

has many steps that need to be taken into account. We know most of the "cafeteros" locally, but we also have an exporter in Colombia who takes care of the quality control of the coffee. We work with a system in which everyone can expect fair payment for their work. This chain starts in Colombia with our coffee farmers. To constantly improve the quality of our coffee, we have a member of our team on site. It supports the coffee farmers and controls the process, even before the coffee cherries are harvested. To achieve our goal of consistently high quality, continuous control of the production process is an important component.

After harvesting, processing and drying, our coffee is imported directly from the producer and roasted at our facility in compliance with the highest standards. It is also extremely important to know the local people and to be transparent. In this way, an interest in the farmers and pickers can also be created among consumers. The more people drink high-quality coffee, the more people can be paid fairly.

So, the biggest impact you have on the lives of the coffee farmers is mainly because you can make fairer wages possible?

Yes. Sure, there are also various certificates for fair trade. Most of the coffees in the

supermarkets are also produced in mass. Here there is a surcharge on the "normal" price, but if this is already not fair, the difference can hardly be made up and the farmers make losses. Commercial coffee cultivation has many social problems, that is why we have chosen direct sales.

Is this form of coffee trading common? Or how does the chain of custody normally look like?

We work with so-called microlots. On our coffee products all information about the origin is always available: the finca, the coffee variety, the coffee farmer and the cultivation altitude. The plots from which we source our coffee are often the best. Nevertheless, farmers must also be able to sell lower quality beans. By the way, with commercial coffee, the owners get a uniform price, regardless of the quality.

By the way, 2021 was a good year for Colombian coffee. Due to heavy frost events in Brazil, the largest growing area for Arabica coffee, many plants died there and the demand for Colombian coffees increased. This was also difficult for us, because it means higher prices. Nevertheless, we proceed according to the policy: fairness for all, starting with the wages of the farmers and ending with the price of coffee for the consumer.

Are there differences between the coffees that are exported and those for the domestic market?

The biggest difference is the quality. In Colombia, the value of coffee varieties is only now slowly being recognized. Until now, it was more of an everyday product for the whole day. The high-quality export coffee is then of course more expensive and few are willing to pay this price. Slowly, however, awareness is increasing here and so mini-roasting plants with specialty coffees are also opening in Colombia.

Are you often in Colombia to maintain your contacts?

Normally we travel once a year, which was of course difficult with Corona. However, on our last visit in October, we wanted to have more family time and worked little. It is also really not easy, after all the fincas are mostly away from the cities and villages. To visit only one finca you actually need a whole day.

You mentioned yourself that coffee cultivation involves many social problems. Can you give an example where differences to the conventional coffee trade become visible?

The biggest problem with commercial coffee are



© Pacandé

the low wages for the very hard work on the fincas. In Colombia, the conditions are also made more difficult by the mountainous landscape. It is a system of inequality. Many of the younger generations have realized that it can be worthwhile to grow smaller amounts with better quality. This allows them to make bigger profits. Secondly, there are the many social conflicts in Colombia. For example, there are regions, such as Cauca, where a lot of Coca is grown. Even if some farmers want to speak out against it, it is possible that criminals will force them to cultivate it. When it comes to safety, there are regions that are considered more dangerous. In general, the situation is very complicated. With so many problems, you shouldn't think in black and white.

There are problems present from the ground up, which can of course be intensified by such a hotly traded product as coffee.

Exactly. The fincas in Cauca often have rather small plots, including mini plots of good quality, but they are often too small for big profits. In 2018 we also wanted to look for new fincas as partners in Popayán. At that time, however, there were major political problems and a national strike. Local people advised us not to visit the fincas for safety reasons. Something like that can happen, but of course not always and everywhere.

In view of these problems, I am really happy that we can offer our coffee that comes from local people who have faced many obstacles and have had to fight for their existence.

How does intensive coffee cultivation in Colombia affect nature?

Colombia is a huge country. There are many bad examples, but also many farmers who care about nature conservation and biodiversity. Jose Manuel Cantillo from Finca Filo del Oso has already won the "Cup of Excellence"



© Pacandé

competition for specialty coffee. He has a really crazy finca where the coffee grows together with many other plants inside a primeval forest. He also hardly prunes the plants but bends the branches down. The ecosystem gives the coffee its speciality. He uses fewer artificial fertilizers and provides better natural nutrition for the plants. Many of the younger generations care about the environment and want to protect it.

To what extent does sustainability play a role in Colombian coffee cultivation?

Slowly this plays a bigger role. There are various cooperatives that are increasingly concerned about different issues. For example, "Cafe Mujeres" supports women in coffee cultivation and "Sueños con Café" people with disabilities. This is a very important issue, especially in rural areas with poorer services. The work of such cooperatives is very interesting because they were founded to support people. Many farmers who can produce very good coffee have learned that the cooperatives invest resources, for example in education, to improve quality and processes before and after the harvest. By getting coffee drinkers interested in the project, they are starting to try better coffees. With time, they notice the difference with the cheap alternatives, which are often drunk with a lot of sugar and milk. So the consumption of better coffees has increased. Corona was a problem for the population here, of course, but also for small roasters. Due to Colombia's financial problems, especially among the middle class, people often must decide whether to place more value on basic goods or to spend money on small luxuries like coffee. Of course, people then often cut back on coffee. Once the financial situation eases, there is great potential here.

On your website, you list in detail how the price of your coffee comes about. What motivated you to do this?

First of all, I must say that by now everything has become a little more expensive. Meanwhile, coffee as a raw material, packaging and logistics are more expensive. The table shows the prices

of our first import. What is important for me: I want to make a difference with my brand. The more people buy the coffee, the more farmers I can give better conditions. At the same time, I am against specialty coffee being a product that only the wealthy can afford to buy and enjoy. That I want to reach all segments of the population with my concept can only be done through this form of transparency. My dream remains that all people can drink specialty coffee and that coffee farmers can live and work under good conditions. For this, the entire coffee consumption has to change and I think that our orientation can lead the way.

Do you think other companies should do the same?

Absolutely. This way, you can prove who makes how much profit with the product. It also builds trust with customers and helps them understand the price. I also get all kinds of comments like that, from "you're cheap" to "you're expensive." Either way, a conscious consumption decision can be built on the transparent price. If you look at commercial coffee from the big brands in the supermarket, it might cost €5 for 500 grams. One should ask oneself how this is possible when the price for Arabica coffee on the stock exchange is 3-4\$ per Libra (=495 grams) (Robusta coffee is



© Pacandé

again somewhat cheaper). Finally, various factors must be included, such as the weight loss during roasting, as well as all the processes, such as packaging, roasting, personnel of the company and the salary for the farmer. As mentioned earlier, raw material prices have increased this year, but many farmers will not benefit because they sign contracts with fixed prices even for three years.

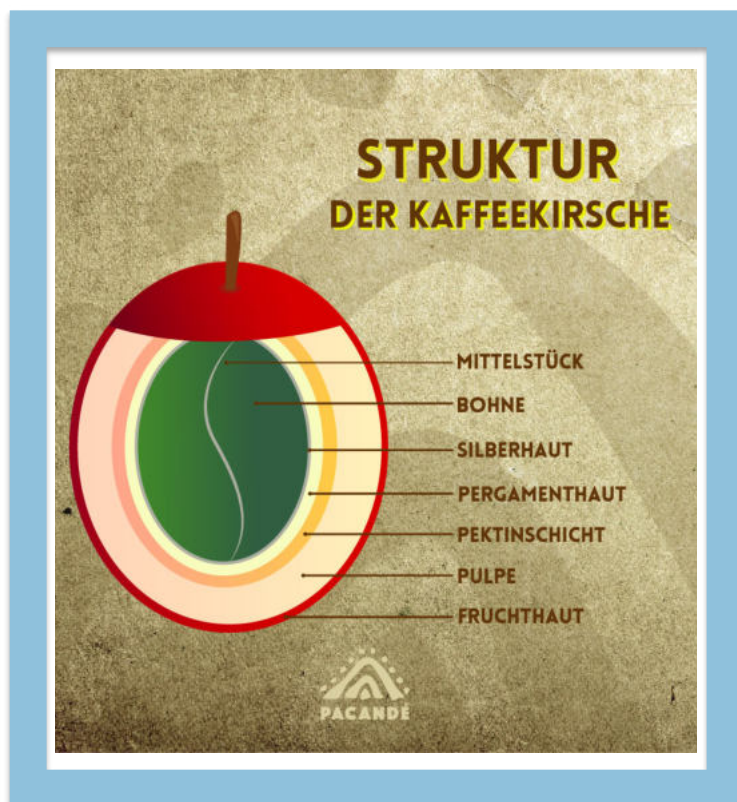
Do you think that more people around the world should get involved and take it into their own hands to communicate to the population that fair coffee consumption is worthwhile?

The whole thing takes on a whole different picture when you know the people on site at the fincas. These are families, people and stories. I want them to be fine. In the same way, I want as many people as possible to enjoy specialty coffee. What I love about my store is that all kinds of people from the neighbourhood store here, young people, parents, grandmas, and try something new. That really brings me great joy.

You write your own YouTube channel, coffee blog and offer workshops. What can people learn there? What motivates you to do this? How is this offer received?

I have started to put videos about the farmers in YouTube. So the customers also get to know the conditions on the ground better. Since Corona, I have unfortunately not found the time to keep on doing it, but I want to do it again.

But to show the people how that really works we also offer three different workshops. One is about espresso, grinding, preparation, extraction; one is about cupping, the process of tasting and evaluating coffee; and one is about filter coffee methods.



“Coffee—a barbaric drink. That poor, tortured bean. All that fermenting and husking and roasting and grinding.”

— Guillermo del Toro, *The Shape of Water*

AN ACCURATE PRICE FOR COFFEE

As previously mentioned, Pacandé provides accurate insight into their pricing policy. The following table shows how the price of an espresso from the Munich-based roastery is composed. The listing was created back in 2017 for one of Pacandé's first batches. In the meantime, the prices have continued to rise.

Even though this is only a single price example, it should be considered at what prices coffee is sold commercially. These prices are often already exceeded by the price of green coffee mentioned below.

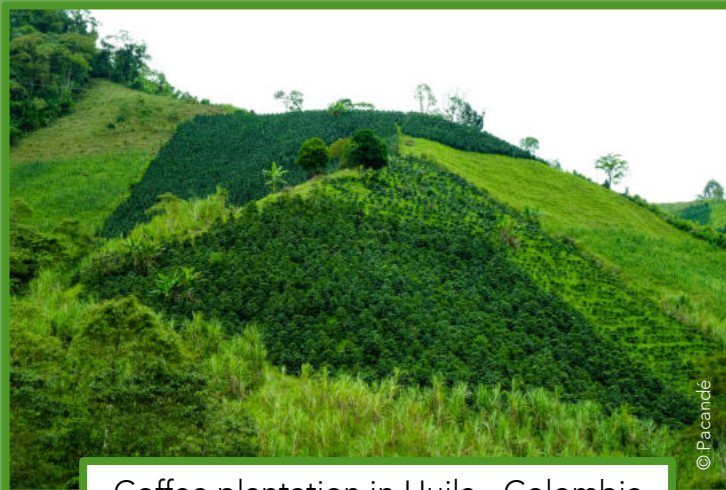
Cost item	Cost per kg
Green coffee at origin	5.75 €
Logistics*	1.40 €
Roasting loss	17 %
Coffee tax	2.19 €
Energy costs roasting	0.05 €
Packaging	0.45 €
Interest on loan	0.05 €
Depreciation of machine	0.20 €
Rent roasting plant, coffee laboratory, coffee warehouse	1.00 €
Utilities (rent, internet, electricity, etc.)	0.08 €
Travel expenses Colombia	0.30 €
Business tax	0.55 €
Other costs**	0.75 €
Labor costs	5.47 €
Discounts for bulk buyers	1.71 €
7% sales tax	1.50 €
TOTAL price	22.90 €

*Sea transport, insurance, customs, temporary storage in Hamburg, transport to Munich.

**Office supplies, shipping costs, insurance, cleaning costs, tax advice, chamber of commerce, homepage, advertising, shipping costs, monetary transactions.

Source: <https://pacande.com/transparenz/?v=3a52f3c22ed6>

WITHIN THE FAMILY



Coffee plantation in Huila - Colombia

In the small Bavarian village of Jedenhofen, we meet Laura Campollo Henkle de Reischl. She runs the "Hofrösterei Cafe am Fischerhof". When you arrive at the house, you notice three things: a fine smell of freshly roasted coffee, a beautiful interior with a variety of coffee grinders and antique brass silos, and a variety of awards on the wall.

From Central America to Upper Bavaria

Ms. Campollo Henkle de Reischl is originally from Guatemala. There she grew up on the coffee plantation of her parents. From her father, a well-known agricultural engineer in Guatemala, she learned the basics of coffee cultivation, harvesting and trade. After participating in a student exchange to Germany during her school years, she later moved completely to Bavaria. Today she lives with her husband Robert Reischl on the "Fischerhof" in Jedenhofen. The decision to roast and distribute coffee in the rural idyll did not come on its own. Through the direct insight into the life of her father, she saw year after year how difficult it is to run coffee plantations. Fluctuating market prices make it difficult for farmers to maintain operations and pay their many employees. This is especially true for small fincas with less than 50 hectares. Many family farms have thus had to give up their livelihoods after being driven to ruin by years of poorly paid contracts. To tackle this problem herself, her husband Robert gave her the idea more than 11 years ago to buy, roast and sell her father's coffee at a fair price. Through this form of direct sales, she is able to produce and enjoy excellent

coffee herself. At the same time, it gives her father the opportunity to maintain the business and pay his many employees a fair salary during harvest time. Once this decision was made, she trained as a master roaster at the Burg Coffee Museum in Hamburg and bought an old roasting machine. Since then, the "Fischerhof" has not only freshly milked milk, but also freshly roasted coffee.

Guatemala

Laura Campollo receives a large proportion of the raw material coffee from Guatemala. Smaller quantities are also sourced from other growing regions, including Costa Rica, Colombia, and Nicaragua. As in all the countries concerned, coffee plays an enormous role for the Guatemalan population. On her father's finca, both Arabica and Robusta coffee is grown, which is very unusual for highland regions. As an agricultural engineer, her father approaches cultivation differently than it is common in commercial coffee farming. He protects local diversity through a variety of plants – one of the certificates in the roastery comes from the regional administration and confirms the number of 19 thousand coffee plants, 20 thousand banana plants, 30 Macadamia trees, and over nine thousand trees of other species – and gives his freedom to flora and fauna. A special feature is the self-made rainwater reservoir. Without planning for this, turtles and fish settled within a very short time. Already many visitors to the finca called the place a little jungle, with a large variety of birds, insects, and mammals.

Sustainability

When asked about sustainability, Laura Campollo also confirms that price is a key criterion. Although many local farmers want to act more sustainably, not everyone can afford it, since not everyone has a dedicated contact person in the coffee importing countries. Even the awarding of sustainability certificates would not always be helpful here, as they cost a lot and the benefits can sometimes be marginal. Through her own company, she has the opportunity to personally support her father and his employees. This form of support is much more direct and in fact also cheaper than with a large administrative apparatus. In the beginning, she did this, for example, with playground equipment for the children, but now she focuses on medical care and education. This leads, for example, to the fact that the children of the field workers now also go to university. From a commercial point of view, this is unfavourable, because in the future there will be fewer workers available for harvesting, but that is not what Laura Campollo is concerned with. What counts here is humanity. Here at the "Fischerhof", the customers know that very well. They know where the products come from, how much work and love goes into them and how the raw materials were grown. Now, after more than eleven years, so many customers come from all over the region. In addition, farmers' markets, a roaster in Neuburg on the Danube and a café run by her cousins in Bremen receive and distribute the coffee specialties. In addition, she repeatedly appears at various trade fairs in cooperation with the district administration as an example of rural entrepreneurship. For the future, Ms. Campollo Henkle de Reischl would like to see better support for sustainable coffee cultivation and direct imports, as well as for the countries of origin. However, her farm roastery will always remain "small and fine".



Each of these flowers will produce a coffee cherry.



A coffee cherry in cross-section.



"Coffee is your ally and writing ceases to be a struggle." — Honoré de Balzac



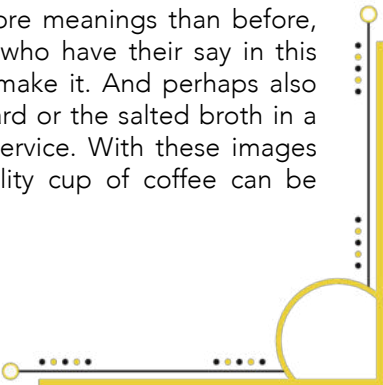
PROSPECTS



In this magazine, we have brought together various perspectives on coffee. We hope that it allowed us to shed a different light on the subject. With reference to the Environmental Studies Program at the Rachel Carson Center for Environment and Society at the LMU Munich, topics from various disciplines around the environmental sciences were included into our reflections. Commercial coffee cultivation is often detrimental to people and nature. Natural forests have to give way for the planting of monocultures, which is harmful to the biodiversity of flora and fauna. Cultivation also requires extremely large quantities of water, which is a scarce resource in many regions. In this way, whole swathes of land are transformed. Coffee farms employ numerous coffee pickers and farmers who are tied to the payment of large industrial companies. Women, in particular, unfortunately often suffer from the harsh working conditions and have to do the particularly poorly paid work at the beginning of the value chain. Coffee is transported around the world by heavy, oil-powered tankers. Hence, our favourite beverage is truly unsustainable in times of global climate change, which is causing severe crop failures. Less or no consumption would be the most morally correct decision here. If only so many people, including us, didn't want to miss a cup of coffee in everyday life. As a result of ongoing climatic changes, the question will arise as to where and how coffee will be grown in the future. In order to make the coffee industry more sustainable, a lot of emphasis has been placed on certificates. However, the question often arises as to who really benefits. The people in the growing regions often have few advantages, as certificates are associated with high costs and it is difficult for consumers to keep track of which certificates say what and whether they are

trustworthy. From the discussions in the context of this work, it could be consistently determined that a direct relationship with the people in the coffee-growing regions brings one thing above all: understanding for the complex processes that lead to correspondingly higher prices when produced sustainably and fairly. As part of the coffee-importing Global North, a general acceptance for reasonable prices in the coffee sector must be created. The higher prices are ultimately reflected above all in decent payment and in farming methods that are less harmful to people and the environment.

As coffee is a globally traded commodity, it is important to note that it makes sense to apply sustainability strategies along the entire value chain. Efficient technical solutions for the cultivation and processing of coffee are under development. In the long term, the product must be planned consistently in order to preserve the necessary livelihoods and natural resources. Finally, the idea of sufficiency must also come into play. Due to the cultural and economic importance of coffee in its growing regions, complete abandonment is not appropriate for the time being. Turning away from cheap, low-quality coffee that is always and everywhere available at the push of a button but bad for the environment and society would be a first step. Conscious instead of excessive consumption. We now associate coffee with many more meanings than before, think of the people who have their say in this magazine when we make it. And perhaps also of Baba Budan's beard or the salted broth in a new Turkish coffee service. With these images in mind, a high-quality cup of coffee can be enjoyed even more.





- Ana Schmitz & the whole Pacandé Team
- Britta Fritz
- Duygu Er
- Fabio Valenzuela Artunduaga
- Jose Miguel Mostacilla
- Jyothy Girish
- Kumar Girish
- Laura Anh Thu Dang
- Laura Campollo Henkle de Reischl
- Laura Kuen
- Luiza Monteiro
- Manuel Gerardo Dussan Villanueva
- Markos Gebreselassie
- Mounika Gowda
- Villemo Karnström

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Final Project
for the Environmental Studies Certificate Program
of the Rachel Carson Center for Environment and Society