OUR S

TEN YEARS OF THE NESCAFÉ PLAN

NESCAFE_®

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SINCE THE LAUNCH OF THE NESCAFÉ PLAN IN 2010

A lot of love went into the cup of coffee in your hands: nurturing the soil, growing the tree, protecting it from climate change.

A lot of energy was poured into things you can't taste: nurturing the community, growing women's roles, protecting children and workers.

A lot of people did things you can't see: nurturing hope, growing incomes, protecting the environment.

A lot of voices discussed things you haven't heard yet.

So, we asked them why they think your day starts better with a cup of respect.

And this is what they said...









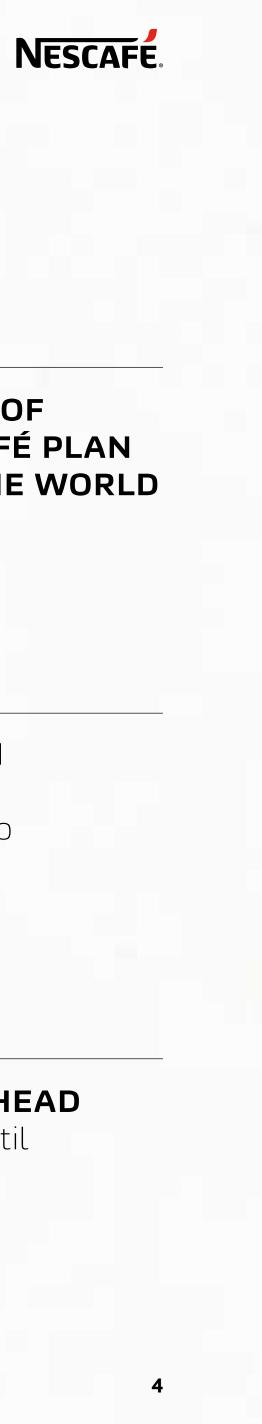








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MILESTONE ON OUR Every year, *Nescafé* supports around 100,000 coffee PRfarmers and buys more than 800,000 metric tons of green coffee – more than 13 million bags, from more than 20 countries. Today, one out of seven cups of coffee drunk around the world is a Nescafé.

A little over ten year ago we launched our global sustainability initiative: the Nescafé Plan. That makes this is an ideal time to pause and reflect on the progress we've made, note the challenges that remain and consider how best to address them.



MAGDI BATATO, Executive Vice President, Head of Operations, Nestlé





DAVID RENNIE, Deputy Executive Vice President, Head of Nestlé Coffee Brands

Nescafé had been engaged in sustainability on a local level for a long time. The Nescafé Plan brought these efforts under one umbrella. We sought to create more alignment and efficiency and to work collectively towards some very ambitious targets. In this regard, we have made significant progress to date, including sourcing 75% of our coffee responsibly. We have also reduced our operations' carbon emissions by 46% and water withdrawal by 53%.

These achievements (and many others) would not have been possible without our outstanding and dedicated teams – both past and present – who have driven the Nescafé Plan at all levels of the organization, along with our external partners. Collaboration and internal alignment are critical to delivering our shared objectives and without this energy, hard work and passion we would not be where we are now. Together we have expanded our responsible sourcing and field programs with coffee farmers to levels never seen before.

We are proud of what we have achieved and humbled at the same time by the scale and complexity of the issues that the coffee sector is facing. While we have made a positive difference to the lives of hundreds of thousands of farmers, their families, communities and landscapes, many more challenges remain.

We rightly celebrate the 10th anniversary of the *Nescafé Plan* with a renewed drive to apply all that we have learnt over the last decade to our activities going forward. It is our hope and intention to continue leading the sustainability agenda in coffee for the decade to come and beyond. 🖊

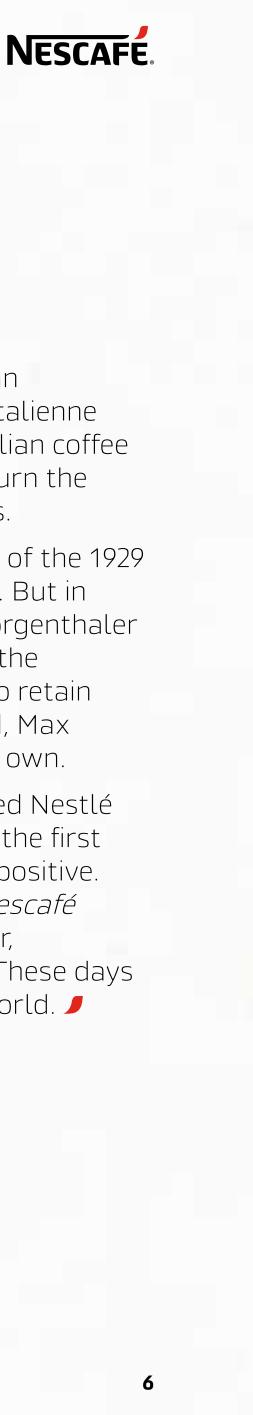








Image courtesy of the Nestlé Historical Archives in Vevey.



In 1929, Louis Dapples, the Nestlé Chairman, was presented with an interesting task by his former employer, the Banque Française et Italienne pour l'Amérique du Sud. The bank owned warehouses full of Brazilian coffee beans, which were sitting unsold. They wondered if Nestlé could turn the beans into a "soluble coffee cube" to be sold directly to consumers.

It seemed an impossible task at the time, especially in the shadow of the 1929 Wall Street Crash and subsequent collapse in global coffee prices. But in 1932, when a young food chemist working at Nestlé called Max Morgenthaler was asked to find a way to create water-soluble coffee, he rose to the

> challenge. In fact, when it seemed impossible to retain the coffee aroma and the project was cancelled, Max persevered and continued to experiment on his own.

His dedication paid off. In April of 1937, a stunned Nestlé Executive Board was invited to a tasting. From the first mouthful, their response was overwhelmingly positive. The scale-up began immediately and in 1938, Nescafé was officially born. By 1940, only two years later, Nescafé was already available in 30 countries. These days it is enjoyed by millions of people around the world.



A young food chemist

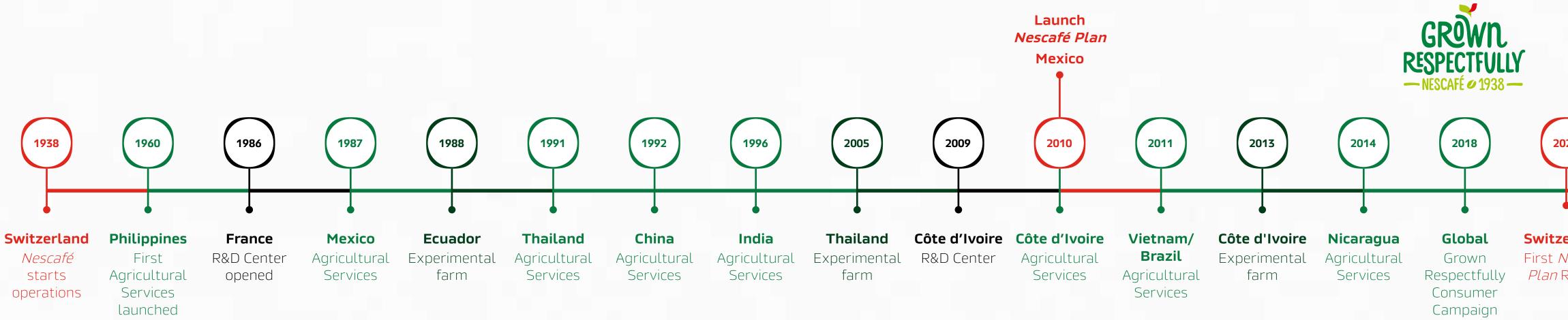
working at Nestlé called Max

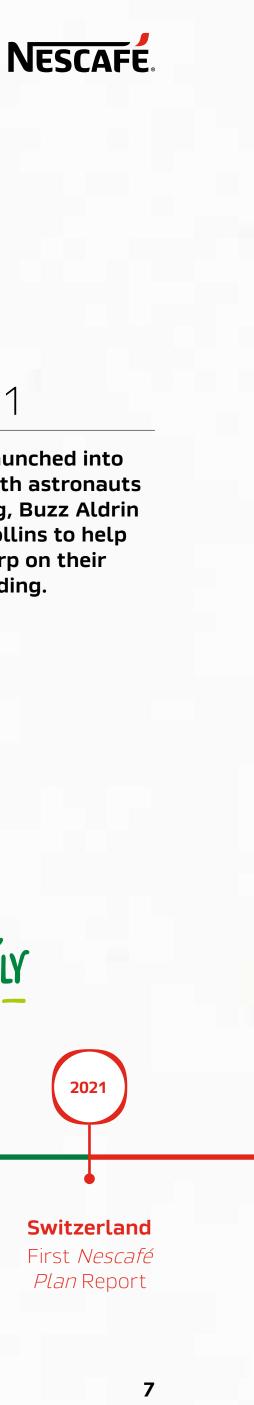
Morgenthaler found a way to

create water-soluble coffee.

1938









1953

Nescafé became the first coffee brand to climb Mount Everest as part of Edmund Hillary's expedition.



Apollo 11

Nescafé was launched into space along with astronauts Neil Armstrong, Buzz Aldrin and Michael Collins to help keep them sharp on their 1969 moon landing.



Nescafé is the world's preferred coffee brand

180

Countries distribute and sell *Nescafé*



117

Cups of coffee consumed around the world is *Nescafé*





NESCAFE.

"You can go back in time, 10-20 years, and there were two key questions that people asked: where does my coffee come from? And how is it grown? Those are still relevant today."

Orlando Garcia, Latin America *Nescafé Plan* Regional Manager & founding *Nescafé Plan* team member







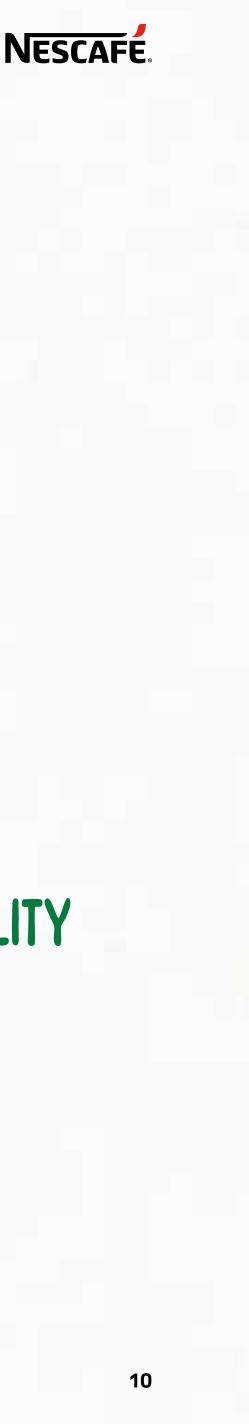
THE NESCAFÉ PLAN

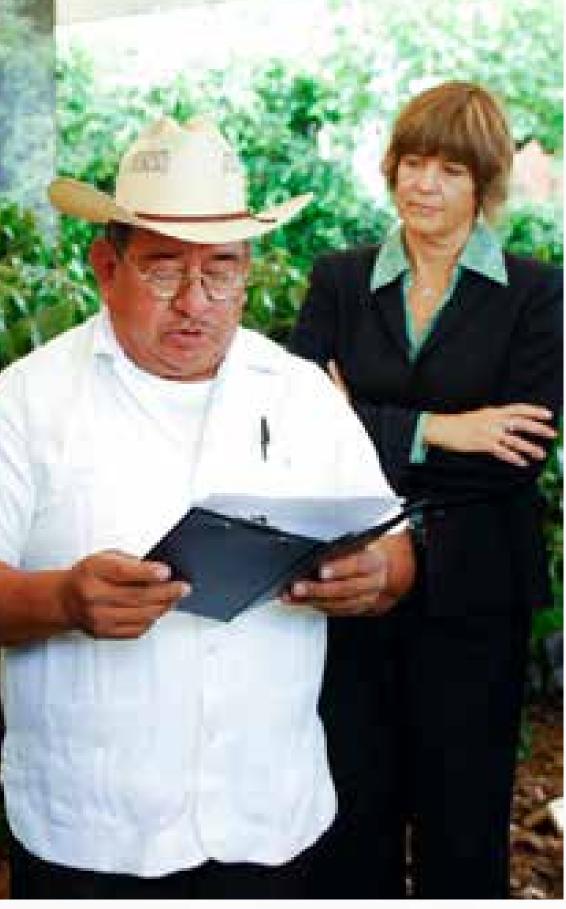
Being the world's leading coffee brand brings with it a huge responsibility, which *Nescafé* has always embraced. As early as 1960, we began helping farmers to adopt best practices with the creation of our first coffee Agricultural Services team in the Philippines. This was the humble beginning of our work to improve farmer livelihoods through improved farm productivity and efficiency.

In 1986, we started pioneering coffee Research & Development work in Tours, France, which focused on Plant Science to improve the resilience of coffee trees. Two years later, we launched Arabica and Robusta breeding programs to create new and improved varieties on experimental farms. Since the beginning, we have worked collaboratively with other institutions seeking to improve coffee farming.

Then, as now, growing consumer demand meant that more coffee – quality coffee – would be needed to guarantee future supply. In the early 2000s, total global production was in the range of 128 million bags. Yet with coffee consumption growing at around 2% a year, the sector would need to produce 155 million bags by 2020 to ensure everyone could still enjoy their daily cup of coffee. And this had to be achieved on the same area of agricultural land and by using more sustainable practices.







THE LAUNCH OF THE NESCAFÉ PLAN MARKED THE BEGINNING OF A STRONGER SUSTAINABILITY STRATEGY AND SET THE GROUNDWORK FOR GREATER PARTNERSHIPS AND ACCOUNTABILITY.

By 2010, the expansion of our Agricultural Services to four other countries had allowed us to impact around 10,000 coffee growers per year. Prior to 2010 we had cumulatively distributed over 16 million coffee plantlets to rejuvenate farms, helping growers to increase their yields and revenues. A total of four experimental farms had been established to actively support our plant breeding programs and research.

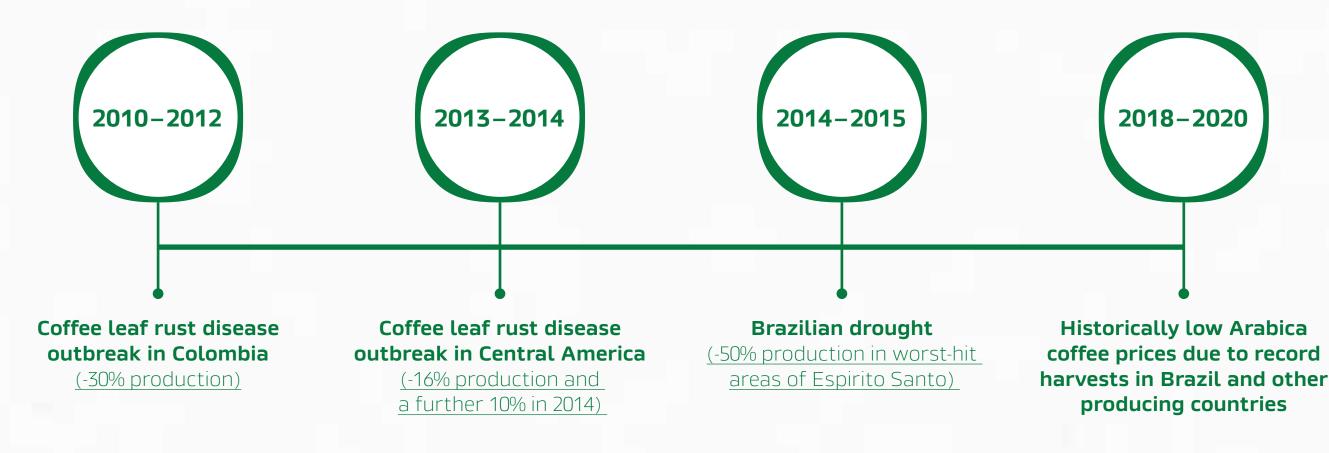
The Nescafé Plan, in other words, was many decades in the making. Our formal launch, which took place in Mexico City in 2010, brought all our commitments on coffee farming, production and consumption under one umbrella – marking the beginning of a stronger sustainability strategy and setting the groundwork for stronger partnerships and greater accountability. We made several commitments, including to significantly increase our purchase of responsibly sourced coffee, and we implemented activities to enable and achieve those goals.

In the ten years since, we have strived to continually improve the Nescafé Plan. Apart from generating significant demand for responsibly sourced coffee, our main goals have always been training farmers, helping with the renovation of coffee farms by distributing plantlets of improved coffee varieties, bolstering farmer incomes, promoting water conservation, preventing deforestation and supporting biodiversity in and around coffee fields. By helping farmers to increase yield and implement sustainable farming practices, we have also helped ensure that consumers can still enjoy great quality coffee.

Today the scale and reach of our activities, our volume of responsibly sourced coffee and the number of newly developed coffee varieties have made the *Nescafé Plan* one of the largest and most comprehensive coffee sustainability programs in the world. While we have come a long way, we know the work is far from over. But by assessing and adjusting our programs for greater impact and by working closely with our partners, we hope to support sector transformation and sustain positive change for decades to come.

CHALLENGES OF THE DECADE

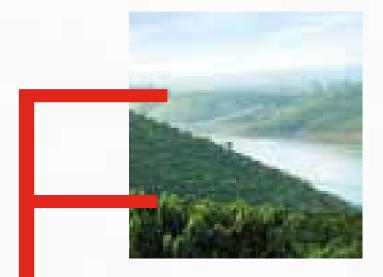
Major coffee events and challenges have underlined the importance of sustainable farming and farmer resilience.





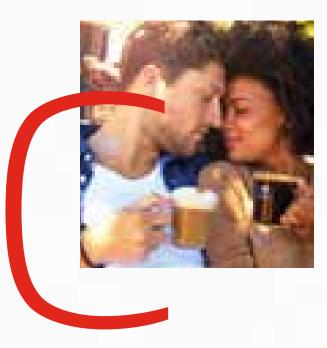




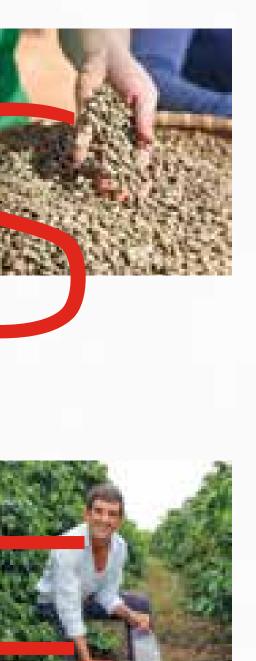




SUSTAINABILITY POURS RESPECT FOR PEOPLE AND THE PLANET INTO YOUR CUP. THAT'S THE QUALITY COFFEE THAT COMES FROM THE NESCAFÉ PLAN.







The smell of coffee is what many people wake up to in the morning. It's the drink that is savored, shared and sipped during special parts of the day by millions of people.

We have spent more than 80 years striving to make sure that our consumer's cup of coffee is filled with respect.

Respect for farmers, by helping them lead prosperous lives with decent incomes. This means healthier and more diseaseresistant coffee trees, good agricultural practices in the field, better business planning and diversified streams of revenue.

Respect for communities, which need to thrive in order for farms to flourish. We account for all the people behind coffee cherry picking, their families and the towns and villages where coffee is pride and heritage. They all benefit from increased monitoring of safety and labor practices and from programs that better equip young people to take over coffee farms.

Respect for the environment, which nourishes us every day. The natural resources of trees, water and air are foundations of life and must be conserved. Better agricultural techniques and reducing water usage and emissions all lead to a healthier planet.

Respect for our consumers, who deserve to know where their coffee is from and that responsible practices are followed all along its production.







NESCAFE.

GROWN RESPECTFULLY

From the outset, we recognized a consumer desire to drink more sustainable coffee. By 2018, we were confident that the Nescafé Plan was mature enough to begin our first major communication campaign. "Grown Respectfully" is designed to inform consumers about Nescafé Plan activities and to give them confidence that their coffee is responsibly sourced.

As part of this, we developed a <u>dedicated section</u> on the *Nescafé* website and started consumer-facing communications, including on pack, point-of-sale and digital campaigns.



A DECADE & PROGRESS

Putting respect into every cup of *Nescafé* has meant making a solid commitment to sourcing our coffee responsibly, improving the economic and social wellbeing of farmers and their communities, and setting higher environmental standards in our value chain. We have invested CHF 350 million to date in activities that we believe are essential to making coffee more sustainable. Achieving our initial goals has only marked the beginning of our journey.

MAKING OUR FACTORIES GREENER

In 20 of our *Nescafé* factories around the world, we now use leftover coffee husks as biofuel, saving 555,000 barrels of oil a year. This is the equivalent to 195,000 tons of carbon per year.



NESCAFE

NESCAFÉ PLAN 2020 TARGETS		2020 ACHIEVEMENTS
RESPONSIBLE SOURCING	70% of total <i>Nescafé</i> coffee supplies to be responsibly sourced	ACHIEVED 75%
	Improving the quality, quantity and sustainability of our coffee supply chain by distributing 220 million coffee plantlets	ACHIEVED 235 million
IMPROVING LIVELIHOODS	Improving coffee farm economics in at least four coffee-sourcing countries	ACHIEVED Mexico, Côte d'Ivoire, Honduras and Vietnam
	Monitoring and improving labor rights in at least two coffee-sourcing countries	ACHIEVED Mexico and Philippines
REDUCE OUR	Reducing by 35% (vs. 2010) GHG emissions (scope 1 and 2) per metric ton of soluble coffee	ACHIEVED 46%
ENVIRONMENTAL IMPACT	Reducing by 35% (vs. 2010) direct water withdrawal per metric ton of soluble coffee	ACHIEVED 53%













RESPONSIBLE SOURCING

~	Greater transparency and traceability to the farmer group
•	Credible third-party organizations independently check farm practices against sustainability standards, which gives us an unbiased and objective assessment
~	The sustainability standards used by the programs are aligned with <u>Nestlé's Responsible Sourcing Standard</u>

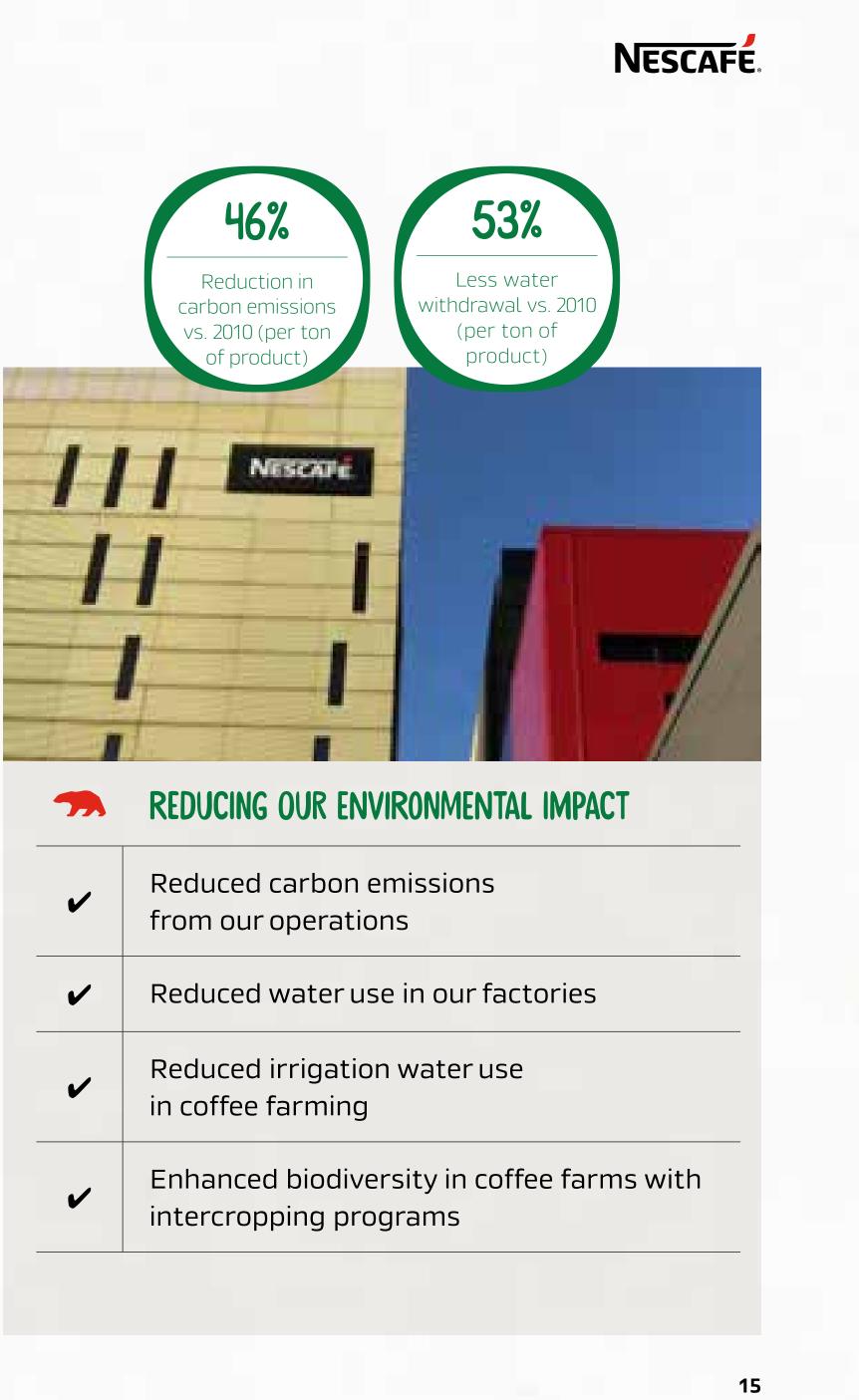
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~	More efficier
~	Stronger, be
~	Upskilling fa and the pron

LIVELIHOODS

nt, resilient farmers

etter coffee varieties

armers with business knowledge motion of diversification



~	Reduced carbon emissions from our operations
~	Reduced water use in our factories
~	Reduced irrigation water use in coffee farming
•	Enhanced biodiversity in coffee farms with intercropping programs





VIETNAM

INDIA



ETHIOPIA

NESCAFÉ PLAN

FARMER TRAININGS

1.000

OF NESCAFÉ PLAN FARMERS USE ORGANIC FERTILIZER AND PRACTICE COMPOSTING

83%

NESCAFÉ PLAN FARMERS HAVE INCOME FROM DIVERSIFIED CROPS

40%

REDUCTION IN IRRIGATION WATER USED BY TRAINED FARMERS

CHINA 91%

OF NESCAFÉ PLAN FARMERS HAVE A WASTEWATER TREATMENT MANAGEMENT SYSTEM

PHILIPPINES

81%

OF FARMS HAVE STRUCTURED **INTERCROPPING PLANTING SYSTEMS**

THAILAND

USD 3,000/HECTARE

NET INCOME APPROXIMATELY EARNED IN 2018-2019 THANKS TO CROP DIVERSIFICATION

BURUNDI

UGANDA

9,000

FARMER TRAININGS

NESCAFÉ PLAN

100

NESCAFÉ PLAN FARMER TRAININGS

KENYA

8.000+

MYANMAR

981

NESCAFÉ PLAN

FARMER TRAININGS

WOMEN NESCAFÉ PLAN FARMERS TRAINED IN WOMEN'S EMPOWERMENT PROGRAM

INDONESIA

ALMOST 1,000 KG/ HECTARE

YIELD RECOVERED AFTER 2017 CLIMATIC **EVENTS IN LAMPUNG**

PAPUA NEW GUINEA

7.000 NESCAFÉ PLAN FARMER TRAININGS

REACHED IN OUR WOMEN'S

EMPOWERMENT PROGRAM





OUR 2010-2020 PARTNERS

MEXICO	Exportadora de Cafes California,	INDIA	India Coffee Board
	Certificadora de Productos Sustentables (CPS), Inifap, Agromod, Tec de Monterrey, Verité	CHINA	China Green Agriculture, Pu'er Coffee and Tea Office, Yunnan Agricultural University, Yara, Penagos
COLOMBIA	Federación National de Cafeteros de Colombia (FNC)	VIETNAM	Western Highlands Agriculture & Forestry Science Institute (WASI), Ministry of Agriculture and Rural Development
CENTRAL AMERICA COUNTRIES: GUATEMALA, NICARAGUA, HONDURAS, EL SALVADOR, COSTA RICA	Cohonducafe, Volcafe, Mercon, Neuman, Ecom, Ihcafe, Anacafe		(MARD), National Agricultural Extension Centre (NAEC), Neumann Foundation, Swiss Development Corporation
BRAZIL	Cooxupe, Olam, Stockler, Volcafe	MYANMAR	Department of Agriculture, local authorities
CÔTE D'IVOIRE	R&D-Abidjan, Centre National de Recherche Agronomique (CNRA), Rainforest Alliance, Centre d'Etudes, Formation, Conseils et Audits (CEFCA)	PHILIPPINES	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), East-West Seed Co.
	FOITIATION, CONSEILS ET AUUILS (CEFCA)	THAILAND	GIZ, Department of Agriculture
UGANDA	Sucafina/Ugacof	INDONESIA	GIZ, Indonesian Coffee and Cocoa
ΕΤΗΙΟΡΙΑ	Technoserve		Research Institute (ICCRI), Rabobank
BURUNDI	Sucafina/Kahawatu Foundation		Syngenta, YARA, Worldwide Fund for Nature (WWF), Rainforest Alliance,
KENYA	Coffee Management Services (CMS)	10	Indonesian Industrial & Beverages Crops Research Institute (BALITRI)
RWANDA	Sucafina/Rwacof/ Kahawatu Foundation	PAPUA NEW GUINEA	Volcafe

A ARTIC





THE NESCAFÉ PLAN

OUR 2010-2020 R&D ACTIVITIES

MEXICO	Plant propagation and multi-location trials of coffee varieties	INDIA	Multi-location trials of coffee varieties
COLOMBIA	Multi-location trials of coffee varieties	CHINA	Multi-location trials of coffee varieties
CENTRAL AMERICA	Multi-location trials of coffee varieties	VIETNAM	Multi-location trials of coffee varieties, nematode study, drought trial
COUNTRIES: GUATEMALA, NICARAGUA, HONDURAS, EL SALVADOR, COSTA RICA		MYANMAR	Multi-location trials of coffee varieties
BRAZIL	Multi-location trials of coffee varieties, coffee fermentation	PHILIPPINES	Multi-location trials of coffee varieties, fertilizer trials
CÔTE D'IVOIRE	Plant and fertilizer trials, drought resistance, farmer field trials	INDONESIA	Multi-location trials of coffee varieties, fertilizer and intercropping trials



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MEXICO	Farmer Business School	RWANDA	Women and youth empowerment,
COLOMBIA	Intelligent Water Management project		nutrition and health, agri-equipment distribution, access to quality
CENTRAL AMERICA COUNTRIES: GUATEMALA,	Distribution of solar driers, <i>Nescafé Youth</i> program		planting materials, trainings on Good Agricultural Practices
NICARAGUA, HONDURAS, EL SALVADOR, COSTA RICA		INDIA	Occupational health and safety, soil
CÔTE D'IVOIRE	<i>Nestlé Healthy Kids</i> program		analysis, household waste, clean water
UGANDA	Health and environmental protection		and sanitation for schools
	for workers and farmers, women's empowerment, nutrition, wellness and health, financial literacy/business	CHINA	<i>Nescafé Coffee Center</i> , educational scholarships, Farmer Business School, water efficiency project
ETHIOPIA	Cooperative organizational capacity,	VIETNAM	Water efficiency project
	mills and wastewater management, traceability, women's empowerment	PHILIPPINES	Agroforestry, watershed rehabilitation, education scholarship, Farmer Business
BURUNDI	Youth empowerment, nutrition, hygiene,		School, vermi-composting, intercropping
	health and gender, training on Good Agricultural Practices, agro-input stores, beekeeping, entrepreneurship and business management	INDONESIA	Tree propagation, <i>Nestlé Healthy</i> <i>Kids</i> program, access to finance, group empowerment, Farmer Business School, intercropping
ΚΕΝΥΑ	Women's empowerment, nutrition and health, <i>Nestlé Healthy Kids</i> program, food security, educational scholarships, clean water, demo plots, soil analysis, financial literacy	PAPUA NEW GUINEA	Educational scholarship, women/group empowerment, water efficiency project, beekeeping program, post-harvest equipment, vermi-composting, health, hygiene, nutrition









Creating lasting, positive change isn't easy. And it certainly doesn't happen overnight. In 2014, we worked closely with the Rainforest Alliance to develop a *Nescafé Plan* Theory of Change, a framework for the desired impact of our interventions. This has become the backbone of our Monitoring and Evaluation (M&E) toolkit (see page 24), and it is used to map the progress of our key field activities.

Until now our actions have been focused on achieving three sustainability impacts: improved coffee economics at farm level, more resilient coffee farming families and communities and more sustainably managed landscapes. The Theory of Change clearly illustrates that various strategies are needed to achieve each goal. Without limiting our adaptability, the model also offers us alternative strategies if an action is not delivering expected results.

For example, from 2013 to 2014, leaf rust drastically reduced yields in Mexico. While we distributed over 30 million plantlets and monitored a successful recovery, the model helped us to recognize other interventions needed to improve farmer incomes, namely around improving farmer business skills and reducing production costs.



Taking us forward

Our framework is by no means static. As we push planting trees and enhancing biodiversity. into the next decade of the *Nescafé Plan*, we will integrate new concepts, such as Living Income, to We are revising and updating our Theory of Change and our M&E toolkit to measure these new ensure that farmers can earn enough money to live decently and provide for their families (see page 57). concepts during the next decade of work.

We will also invest in climate-related actions across the supply chain to decrease our impact on the environment. This means removing more carbon and delivering important ecosystem services in the landscapes we source from, working with farmers

and suppliers to protect and restore agricultural lands, preventing and eliminating deforestation,

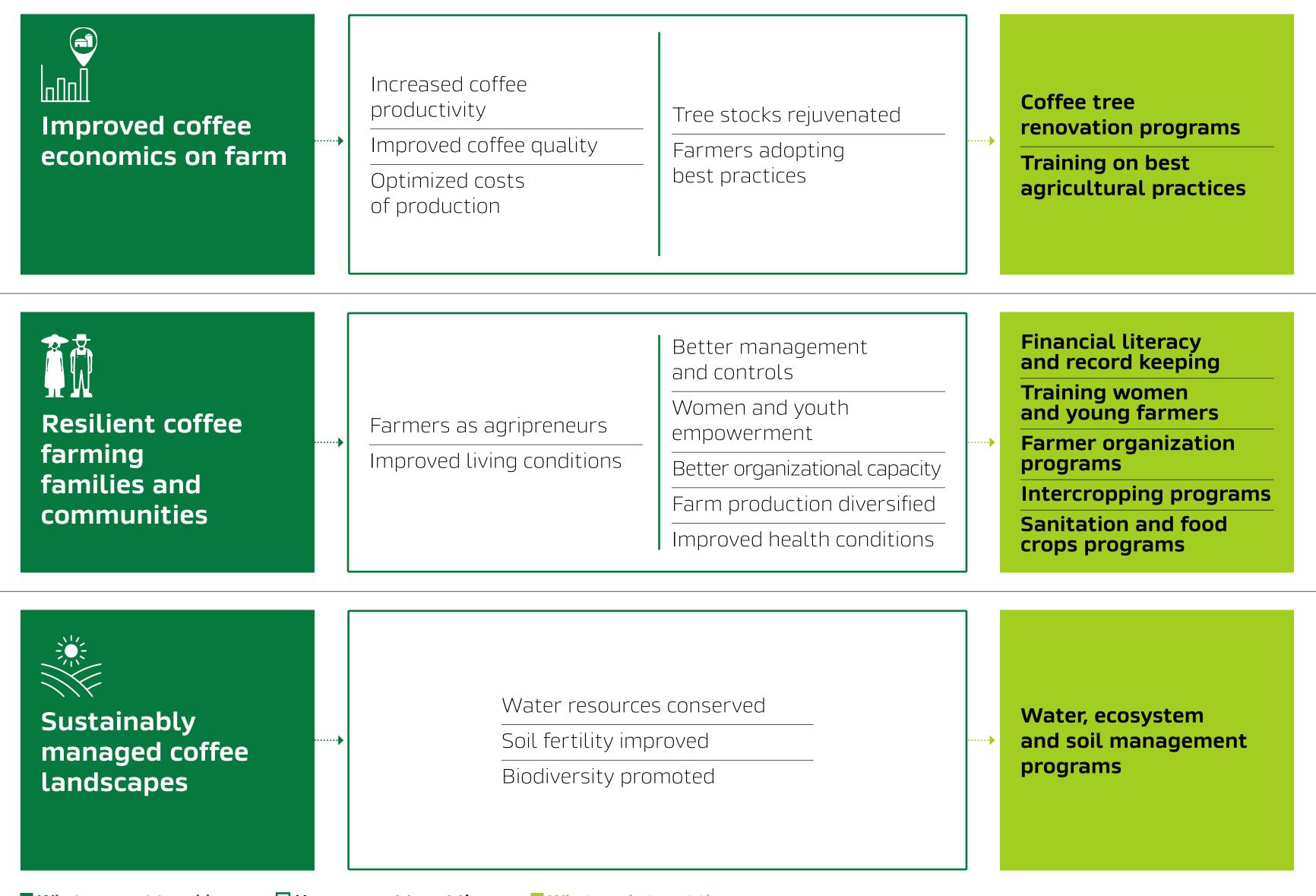
Our strategy extends to our packaging as well, with initiatives to tackle plastic waste and to find improved solutions to reduce, reuse and recycle. Our ambition is to achieve 100% recyclable or reusable packaging by 2025.







Our Theory of Change so far



What we want to achieve









GOOD MEASURES FOR POSITIVE CHANGE

We need to ensure that our programs are working on the ground and that they make a positive difference to farmers' lives, communities and the environment in the long term. We work with the Rainforest Alliance to conduct our Monitoring and **Evaluation and to enhance our impact** in a systematic and measurable way.

"If you don't have visibility of results, you can do the same thing for ten years and never know if it's working."

Marcelo Burity, Head of Green Coffee Development, Nestlé



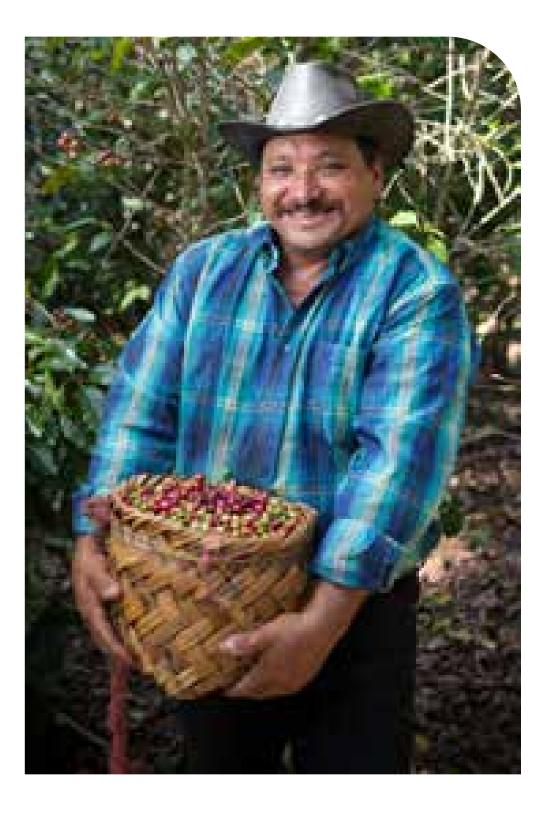
But it's not enough to increase the number of agronomists, plantlets distributed or entrepreneurial trainings. We need to pilot new activities, transfer knowledge to farmers and ensure its adoption, evaluate initiatives on the ground and, most importantly, measure our impact effectively so we can see if our interventions are achieving what we want them to. We want the farmers to actually see and feel a positive impact and for our programs to be held accountable.

For this reason, in 2014, we developed our Monitoring and Evaluation (M&E) activities in partnership with the Rainforest Alliance to better measure, strengthen and harmonize our field activities. Our Theory of Change was used as a framework to set key performance indicators (KPIs) in relation to farm economics and social and environmental impacts. Then the Rainforest Alliance implemented our M&E activities, by training local partners on the ground to collect, analyze and report this data, and by supervising this work.

M&E activities are needed to make sure that the Nescafé Plan accounts for each initiative at the farmer level, learns from its strengths and weaknesses, and adjusts its interventions to increase impact. Throughout the process, we keep an open dialogue with the farmers so that we can get their perspectives, account for their challenges and work together to develop practical solutions, resulting in sustainable benefits for livelihoods and communities.

NESCAFÉ

The Nescafé Plan must constantly assess how our strategies can lead to more resilience for coffee producers in our own supply chain and beyond. Improving coffee productivity and guality, and strengthening social, economic and environmental conditions, means understanding the challenges farmers face, and identifying solutions to help overcome them.











Monitoring & Evaluation key performance indicators

Key performance indicators are designed to measure progress towards our goals and alignment with common sustainability frameworks in the coffee sector and the Sustainable Development Goals.

ECONOMICS

Measuring farmer earnings and earning power from coffee and other crops

KPIs

- ✓ Net farm income
- ✓ Coffee revenue
- ✓ Productivity
- ✓ Cost of production
- ✓ Farm diversification
- ✓ Adoption of best agricultural practices

SOCIAL

Measuring our impact on farm families and workers

countries with annual

Rainforest Alliance

impact assessments

KPIs

- ✓ Bookkeeping records
- ✓ Financial literacy
- ✓ Gender and youth participation
- ✓ Safe working conditions

ENVIRONMENT

Measuring water, and biodiversity

KPIs

- ✓ Watershed conservation
- ✓ Household wastewater tre
- ✓ Shade coverage
- ✓ Soil conservat
- ✔ Mill water cons
- ✔ Mill water trea
- ✓ Irrigation wate conservation





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GENERAL

KPIs (qualitative)

- ✓ Satisfaction with Nescafé Plan program
- ✓ Farmers' views on future outlook

A fuller assessment of impact

Our M&E was launched in 2014 with data collection in Mexico, Côte d'Ivoire and Indonesia. After a few years, we felt our knowledge was deep enough to expand assessments to an additional six countries. The Rainforest Alliance now trains local partners to conduct M&E in 13 countries, supervising their work at the same time. Our *Nescafé* field staff also collects data when visiting farms, further deepening our insights into activities on the ground. Our plan is to extend M&E activities to all 15 countries where our farmer field programs are located (including Nicaragua and Peru).

Because our data collection in most of these countries is relatively recent, and it takes several years to see results, we cannot yet measure the full impact of our interventions. However, we are fully committed to transparency and we will continue to report our progress, share our findings and disclose the areas where challenges remain.







HOW MONITORING & EVALUATION WORKSOur Monitoring and Evaluation (M&E) system was jointly designed

by Nescafé and the Rainforest Alliance. The implementation of our standardized toolkit began in 2018 and we continue to manage the system together. Data collection is undertaken by local partners under the supervision of the Rainforest Alliance. In addition to this external M&E system, Nescafé Plan staff collect data when they are visiting farms, further deepening our insights into activities on the ground.

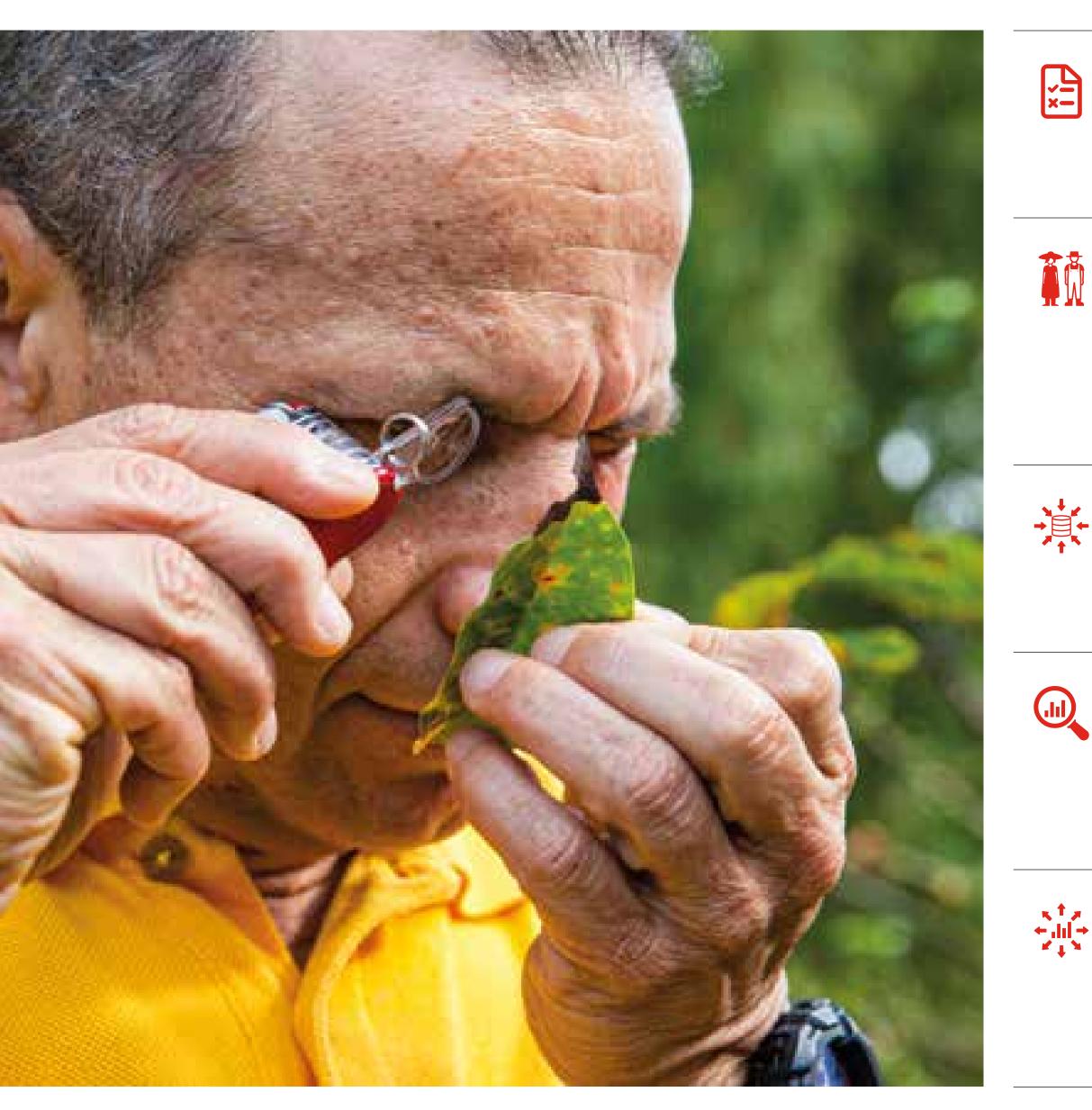
NESCAFE













Survey design

A 100+ question survey was designed by the Rainforest Alliance to evaluate the indicators outlined in the Theory of Change (see page 23). This is continually updated, with guidance for complex topics such as shade tree cover, farm economics and pruning.

Sampling methodology

In most countries, *Nescafé* sources directly from thousands of smallholder farmers. To collect data, we use a sampling methodology of 95% confidence with a 10% margin of error – sampling 100–120 farmers per country. The Rainforest Alliance selects a random sample, usually stratified by geographic region. Where possible, the same farmers are visited each year to create a data set over time.



Data collection

In-country partners are selected to collect data. They are contracted by *Nescafé*, and supervised by the Rainforest Alliance. Data is collected over a one-to-two-month period and submitted to the Rainforest Alliance for review and data cleaning.

Data analysis

After its review, the Rainforest Alliance analyzes and presents the data based on the Theory of Change indicator framework. Data is usually presented as country averages (instead of totals). This data is corroborated with Nescafé's internal M&E data collection process.



Reporting, communications and adaptive management processes

The data is used for external reporting and internal management. It is shared with global and country teams to provide support where needed. Insights are fed back into the Theory of Change framework and analyzed from a practical standpoint to inform future activities and strategic focus areas. The cycle then begins again.

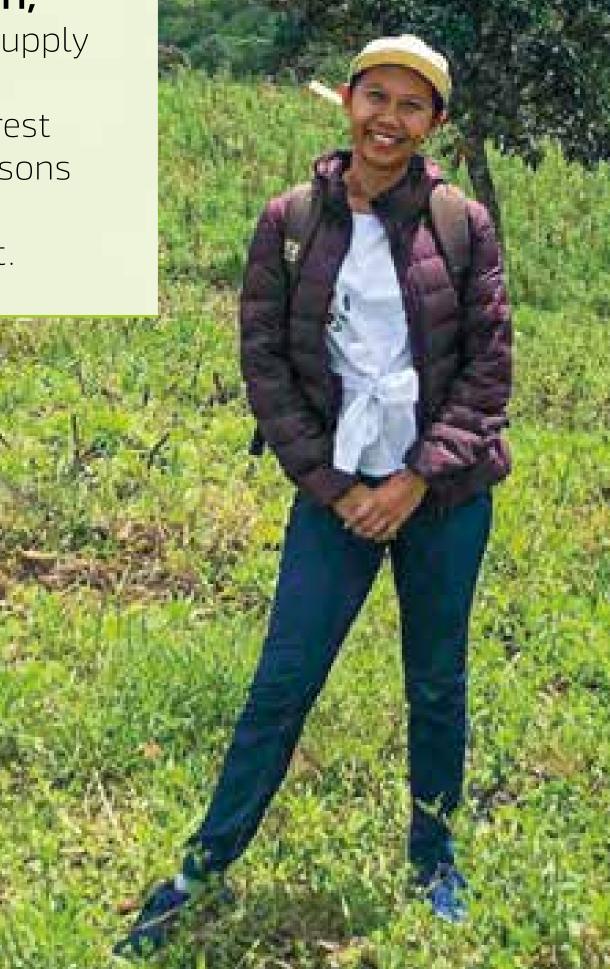






Yustika Muharastri,

Asia Pacific Lead, Supply Chain Monitoring & Evaluation, Rainforest Alliance, on the lessons and adventures of impact assessment.



"WE TRY TO FIND SOLUTIONS TO FURTHER STRENGTHEN THE INTERVENTIONS."

am responsible for managing the data collection and analysis of the Nescafé Plan monitoring and evaluation (M&E) campaigns in Asia. Once a year I visit *Nescafé Plan* initiatives in the region, in Indonesia, Vietnam, the Philippines, Thailand, China and India. It's interesting for me to understand and learn from these various cultures and to witness the everyday challenges farmers are facing in different countries. In the Philippines, for example, most coffee farms are located in mountainous areas with little infrastructure. From a main village you have to hike many hours to visit one or two farmers' houses, and then you have to walk from the farmer's house another good distance to the coffee farm. There is an option to ride a horse or water buffalo instead of walking, but for me it's just too dangerous!



I deliver training and coach the data collectors over three to four days. The team normally consists of four or five local independent enumerators who conduct a total of 100 to 200 farm surveys over a period of one or two months. The Rainforest Alliance selects a random sample of farms from the *Nescafé Plan* supply chain, usually stratified by geographic region. The Nescafé Plan Agricultural Services team in each country facilitates the introduction to the selected farmers. From the data analysis, we can track progress over time, understand what activities work well and identify those that are not delivering the expected results. These activities are then reviewed and adjusted to ensure positive impact.





Assessment in action

The framework used is based on the Nescafé Plan Theory of Change and key performance indicators. This allows us to see how the sustainability program generates outcomes and impacts for the coffee growers, communities and the environment. We share and discuss the results with the Nescafé *Plan* Agricultural Services teams and try to find solutions to further strengthen the interventions. What training has worked, what did not work and why? Changes in farmers' behavior cannot be achieved overnight. It takes intense guidance and assistance for farmers to apply good agricultural practices and show positive results.



In Indonesia, for example, more than half of the targeted farmers have successfully adopted grafting to rejuvenate trees with selected material, which was an entirely new practice when this was introduced by the Nescafé Plan. Also, while agro-chemicals have not been entirely eliminated, they were successfully reduced, with farmers in Indonesia combining them with manual weeding and pest management approaches. Another good example of a more sustainable practice is crop diversification. In Indonesia and Vietnam, the Nescafé Plan trains farmers on intercropping models and the adoption of these practices are visible in the field. This is helping the farmers to spread production and price risks and to optimize land usage, thereby increasing farm income.

The most challenging part of our job is to measure coffee economics, because in many areas most of the smallholder farmers do not keep records or if they do, they are only basic ones, as they do not see a direct benefit. They do not track expenditure on cultivation, farm management, inputs or labor, including personal time spent at the farm.

Many of them do not record basic information about their sales, such as dates, volumes and prices. Whenever we conduct surveys, farmers answer questions based on their memory and share estimated income and expenses, which makes it difficult to gather precise data.

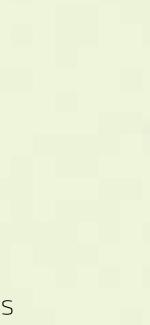


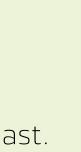
Making a difference

Great monitoring and evaluation can be done internally by companies, but it's just not the same as bringing in an external perspective. Through independent observation and analyses we can highlight the positive achievements but also interventions that are not delivering and need adjustment.

For example, we showed the Agricultural Services team that most of the farmers in Indonesia still hadn't applied record keeping, even though they had received training in the past. Through further in-depth discussions with the farmers we were able to learn that the distributed templates were too complex for most of them. Most of the farmers have a low educational background, so we needed to simplify the bookkeeping templates to ensure the application of learned financial management practices.

I really enjoy visiting all the coffee origins and meeting the growers. Even though it's challenging, this is an exciting experience. I can enjoy the scenery, which is very beautiful, and see the coffee plantations develop in harmony with nature. For me, it's amazing. 🥒















"DESPITE DIRE WARNINGS OF **'A WORLD** WITHOUT COFFEE', THE **BELOVED BEAN** WILL ENDURE. MANY FARMERS, HOWEVER, WILL **NOT – UNLESS** WE SUPERSIZE SUSTAINABILITY **EFFORTS.**"



busy pollinators and beneficial bugs to help control pests. Farmers have limited control, and the slightest imbalance can reduce yields or even result in crop failure. Most coffee farmers manage small plots, around half a hectare to two hectares. Millions of smallholder farmers do the planting, pruning, picking and processing by hand, following traditional practices handed down through generations. Living and laboring so close to the land gives coffee farmers an intimate understanding of their interdependence with nature.



Chris Wille, Co-founder and former Chief of Sustainable Agriculture for the Rainforest Alliance, and one of the original architects of the Nescafé Plan, on the environmental imperative for sustainability in coffee.

Coffee farmers have a famous, natural ally: the rainforest. The coffee tree evolved as a shade-loving understory plant in the rainforests of Africa. Still today coffee grows wild in remaining patches of rainforest in Ethiopia. For centuries, coffee was cultivated under a rainforest canopy. But in the 1970s, agronomists and aid agencies, aiming to increase yields, began promoting a new way to grow coffee: open field monocultures. Many farmers deforested their farms and replaced the traditional varieties of coffee plants with new hybrids that could withstand the equatorial sun.

Given heavy doses of fertilizer and pesticides, the densely planted rows of 'full sun' coffee often greatly increased yields. This transformed much of the coffee landscape and had devastating consequences for biodiversity and the environment. And it caught the attention of the growing Save the Rainforest movement started by the Rainforest Alliance and other conservation groups.



Save the rainforests

Activists asked why farmers and forests couldn't continue thriving together. In the early 1990s, rainforest defenders, farmers, scientists and coffee companies began weaving a conservation coffee strategy. Led by the Sustainable Agriculture Network (a coalition of NGOs in coffee-producing countries), changes in farming practices were agreed that would guide farms toward sustainability – making them environmentally friendly, socially responsible and economically prosperous.

"Consumers have the easiest job, and one of the most important: wake up and smell the sustainability."

NESCAFÉ

Saving forests and reforesting benefits farmers. Trees protect coffee from tropical rain, wind and sun. Coffee beans grown in the shade ripen more slowly and naturally, which improves quality, attracting specialty coffee buyers and premium prices. Trees help control soil erosion, recycle nutrients and protect watersheds.

Trees supply fruits, fibers, medicines, spiritual talismans, building materials and other goods. A nearby source of firewood is critically important in areas where families spend hours each day foraging for fuel. The farm forest harbors abundant and diverse wildlife. Trees sequester carbon, aiding in the fight against climate change and offering the possibility that some farmers could market carbon credits as well as coffee beans.

The coffeelands are crucial players in combating two crises: climate change and the shattering decline in biodiversity. Unless they are deforesting or improperly applying

fertilizers, coffee farmers do not contribute much to climate change – but they were among the first to feel its negative effects: erratic rainfall, droughts, floods, pest and disease outbreaks, and temperatures too high for the sensitive coffee plant. Meanwhile, the Earth is losing species at an unprecedented rate, largely due to tropical deforestation. In the time it takes to read this report, 1,370 ha. of tropical forest will be destroyed.

"Trees sequester carbon, aiding in the fight against climate change and offering the possibility that some farmers could market carbon credits as well as coffee beans."

Taking in the big picture

Coffee growers face many other challenges that are interlinked, complex and deeply rooted. Farmers must conserve natural resources and address social issues in order to prosper economically. They must halt erosion and runoff, build fertile soils,

> conserve water, protect streams and watersheds, safeguard wildlife, control waste and pollution, learn biological controls for pests and disease and carefully manage fertilizers and pesticides. At the same time, they strive to be positive members of the community, protect children and keep them in school, ensure good wages and working conditions for hired laborers, and to promote health, hygiene and safety for everyone on the farm. These challenges are, of course, exacerbated by the global Covid-19 pandemic.

Conservationists, coffee companies and consumers can't simply demand that farmers do these things. Too many coffee growers are struggling

to make it from one harvest to the next; they must minimize risks and maximize production. Instead of issuing demands from afar, NGOs and companies are working side by side with farmers, sharing information, sharpening old tools, developing new ones and identifying incentives for change. The synergies are exciting: sustainable, climate-smart farm management practices are regenerating the environment and energizing rural communities while increasing farm productivity and farmer prosperity.









The entire coffee sector bustles with sustainability projects, and the coffeelands bloom with hopeful signs as experts learn evermore efficacious ways to organize and train smallholder farmers, implement landscape-level projects and spread the green gospel of agroforestry and farm diversity. Plant breeders are releasing new coffee varieties that are more resistant to disease and climate change. Researchers are gathering data and revealing new approaches to everything from water conservation to the links between worker well-being and harvest size. Coffee is the most certified crop and programs to measure and verify progress abound Many farmers receiving training show impressive gains in efficiency, bigger harvests, better quality beans, profitability, human health and welfare, and conservation of natural resources.

Why, then, are there still reports of deforestation, child labor, failing farms, pervasive poverty and other problems? Because sustainability is a marathon, not a sprint. It will take time, resources, imagination and innovation. The scale of the challenge is daunting. An estimated 30 million people in 70 countries grow coffee, mostly on small and remote farms; many are not yet receiving training or technical assistance. As the world warms and competition for natural resources increases, new agricultural challenges arise. Demographic and economic forces also conspire to raise the stakes. Most coffee farmers live perilously close to the edge, without savings, pensions, adequate health care, credit, insurance or government support. Not seeing a future in agriculture, rural young people are fleeing to cities.

Despite dire warnings of "a world without coffee", the beloved bean will endure. Many farmers, however, will not – unless we supersize sustainability efforts. The rich history of the sustainable coffee movement points the way forward. Everyone in the coffee chain, from farmers to consumers, has a role to play. With sweat and smarts, farmers are doing the hard work and taking most of the risk. Their courage, determination and resilience should inspire us all to redouble our efforts.



COFFEE SECTOR TO-DO LIST

•	Create more shared value for farmers
~	Use agroforestry and other nature-based solutions to achieve net-zero carbon
•	Incentivize sustainable farm-management practices
•	Stop all coffee-related deforestation; plant native trees
•	Advance on all relevant UN Sustainable Development Goals
~	Renovate farms with new, high-yielding, disease-resistant, climate-resilient varieties
•	Motivate the next generation of coffee farmers
•	Connect farmers to consumers
•	Intensify collaboration among coffee conservation actors and bring in new players
•	Improve circularity of packaging
~	Protect wildlife habitat



\mathcal{D} A CUP WITH AN EXPERT



Consumers have the easiest job, and one of the most important: wake up and smell the sustainability, know where their coffee comes from and under what conditions it was grown and favor those brands that are supporting farmers.

Coffee companies, the traders that convey beans from farm to roaster, NGOs and others working in partnership with farmers strive to ensure that their interventions are practical, impactful, science-based and evidence-driven. Their individual efforts are magnified through coalitions where responsibility, skills and data are shared. But bringing all farmers into the coffee-cultivation renaissance will require deeper and more inclusive collaborations. We must recruit more government agencies, banks, research and teaching institutions, retailers, charities working on health and social justice and others that may not yet have joined the inner circle of coffee collaborators. Collaboration should become so ingrained, so natural, that it goes unnoticed.

"COFFEE FARMERS HAVE A FAMOUS, **NATURAL ALLY:** THE RAINFOREST."

Looking forward

Another necessary mind shift: coffee sustainability actors, like good ecologists, must think holistically. This means seeing that all the social, environmental and economic challenges are inter-related and are best addressed together. Holistic thinking means seeing the farm as a nature-based business within an ecosystem within a larger socio-political complex, influenced by forces such as weather, governance, demographic changes, technological disruptions and consumer trends. It means, for example, seeing the connections between climate change, social justice and farm economics. An ecosystem is more than the sum of its parts. Sustainable coffee solutions are more than a collection of projects. Big-picture, holistic thinkers don't waste time following a single thread; they see the future of coffee in the fabric of experience, facts and ideas.

Together, with continued passion and persistence, we can foment a future where coffee farmers thrive in harmony with nature, ecosystems regenerate, wildlife abounds and consumers enjoy coffee made from beans that ripened amidst the sounds of birdsong. 🥒







TRUST





SOURCING COFFEE RESPONSIBLY

Making sure our coffee meets sustainability standards and that programs are checked by external bodies brings benefits throughout the value chain and supports the future supply of higher quality coffee.

RESPONSIBLY SOURCED MEANS

~	Greater transparency and traceability within the farmer group
•	Credible third-party organizations independently check farm practices against sustainability standards, which gives us an unbiased and objective assessment
•	The sustainability standards used by the programs are aligned with <u>Nestlé's Responsible Sourcing Standard.</u>







Our commitment to responsibly sourced coffee is the cornerstone of the Nescafé Plan. Since 2010, we have increased the amount of responsibly sourced coffee we buy from our suppliers (and farmers) to reach 75% of our global volumes.

Responsibly sourced coffee is traceable to the group of farms where it was grown and is produced in accordance with sustainability standards that have been validated as equivalent to our Responsible Sourcing Standard. Traceability and compliance are verified by independent organizations, such as 4C Services, the Rainforest Alliance and Fairtrade, which deploy accredited local auditors to assess a range of factors, including social, environmental, economic and health and safety conditions at farms.

These programs also allow us to identify sustainability challenges that need more targeted interventions. For example, we have identified labor rights hotspots, such as Mexico (see box on page 38), and we are working to improve our ability to monitor and detect potential violations. This allows us to take focused remediation actions to support improvements as a required condition to continue commercial relations with those farms.

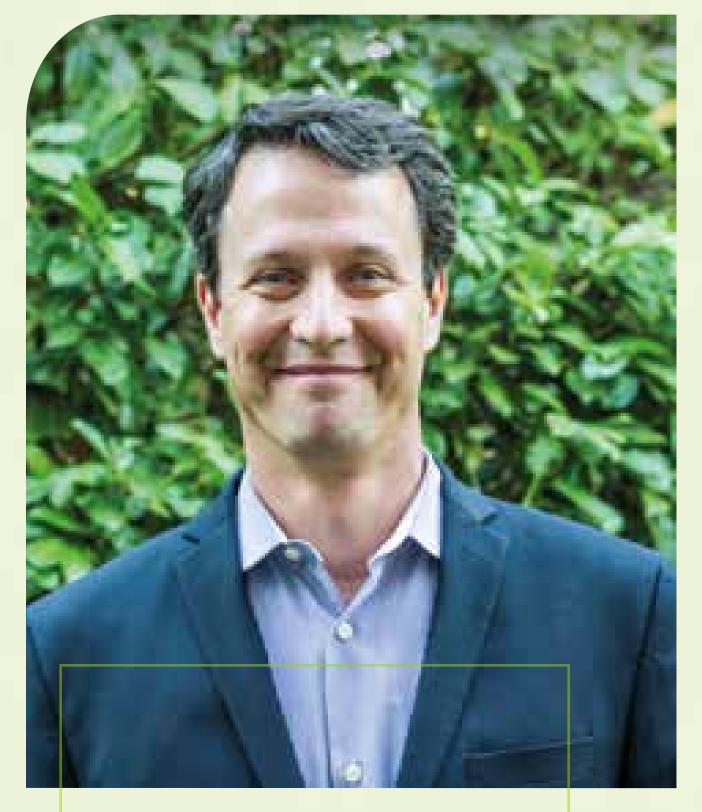
NESCAFÉ

This brings positive benefits throughout the value chain and supports the future supply of higher quality coffee. It gives us clearer visibility about where the coffee came from and how it was grown. At the same time, farmers benefit from accessing markets for sustainable coffee, improving their farming practices and earning a premium for their coffee. The "win" extends to consumers, who can be assured of a high-quality and sustainably produced product, and can make informed choices about their purchase.

Our partner, 4C Services, has played a major role in making our Responsible Sourcing program more inclusive to smallholder farmers (see following story). By managing many 4C farmer units ourselves since the earliest years of the Nescafé Plan, we have been able to follow the sustainability journey of thousands of our coffee farmers and realize net improvements through each re-certification cycle.







Gustavo Bacchi,

Managing Director, 4C Services, on the importance of certification and how evolving its approach benefits farmers. y grandfather inspired me to become an agronomist. At the time, he was quite a pioneer helping coffee farmers to preserve their soil as part of the Brazilian government's technical assistance program. Then as a student, I became involved in a comprehensive agroecological project that was presented during the well-known UN Conference: the Rio de Janeiro Earth Summit. Later, when I began conducting research trials in a farmers' cooperative during my first job, I learned the importance of innovation and the application of good practice at the farm level. Interest in this work led me to a career in agricultural sustainability, and eventually 4C.

4C Services is a coffee certification program natural resources, and awareness of occupational designed to increase sustainability and good health and safety issues. Today it is the largest practices at the farm level, mainly by integrating smallholders into farmer groups. It was developed by multiple members of the coffee sector, including Certification plays an important role, as it is cooperatives, trading houses, universities, roasters, independent of other commercial and political interests. It helps to visualize and prioritize issues, governments, non-governmental organizations and civil society, all seeking a more inclusive so that plans can be actioned in response to what alternative to the more well-known certification is happening on the ground.



"WE HELP TO VISUALIZE AND PRIORITIZE ISSUES, SO THAT PLANS CAN BE ACTIONED IN RESPONSE TO WHAT IS HAPPENING ON THE GROUND."

schemes of the time. Since its launch in 2007, 4C has enabled a vast number of coffee farmers to access sustainability certification and its beneficial effects, such as various techniques related to good agricultural practices, preserving natural resources, and awareness of occupational health and safety issues. Today it is the largest global certification scheme within the coffee sector.



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Strong foundations for sustainability

Certification is aimed at helping producers to sustain themselves in the long term. If economic viability is not achievable, there is no incentive to improve environmental and social issues. In the last ten years of the *Nescafé Plan*, we have been able to observe concrete improvements in many countries thanks to the program's strong technical assistance.

Certification alone will not be able to address all the critical issues, such as the use of pesticides, handling of agrochemical waste and, in certain hotspots, deforestation, forced labor, child labor and a lack of traceability. Our independence of commercial interests and impartiality means that we cannot (and are not allowed to) provide technical assistance and consultancy at the same time. However, certification is used to check for the presence of unacceptable practices and makes it possible to take a picture of the new reality. This "before" and "after" comparison makes it possible to measure the progress made from implementing good farming and management practices.

The Nescafé Plan's consistent, long-term strategy has given a very clear signal to the coffee

supply chain and sector on the direction of the company. This is essential, because then farmers, cooperatives and traders can follow, implement and make medium- and long-term investments. Many of them are not looking beyond the next harvest. Going forward, we must work on improving our communication to them about recommended technical assistance strategy, so that they have reliable information. We can bring attention to areas such as soil health and soil conservation, which is a practice that needs focus. Many improvements can and should be implemented through simple and cost-effective solutions. If we want to include more farmers in

sustainability, and to multiply the knowledge to develop certain farmer clusters and communities, we need to be more innovative and run pilot projects to support faster and more standardized audit procedures. Technology should be leveraged as a tool for capacity building and training.

Having worked more than 15 years in this sector across different standards and different countries, it's clear to me that my mission is to help producers to become more efficient and sustainable. Now, I have to say, I cannot do anything else in my life... it's my passion!

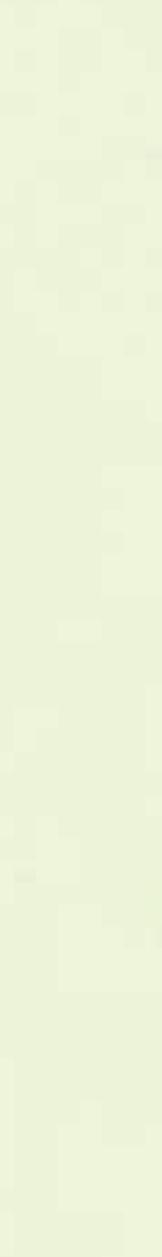
NESCAFE

PROTECTING COMMUNITIES AT RISK

In certain cases, our assessments identify highrisk situations that require additional monitoring and action. Three years ago, we engaged local monitoring partner Certificadora de Productos Sustenables in Mexico to specifically focus on in-harvest labor inspections. This additional layer of compliance is aimed at protecting the most vulnerable populations where there is increased pressure from migration and economic inequalities.

We work with producers to improve their own due diligence and social compliance systems, and create stronger cultures of respect for human rights, such as worker health, safety and security. This includes adequate meals, sanitation, clean water, housing and safety equipment for the many migrants who arrive for the harvest season and live on the premises. This also entails vigilance against labor performed by minors who arrive with family members. Farms that commit serious violations are engaged and supported in order to eradicate these practices. Any farms that fail to do so are excluded from our supply chain. Our approach will continue to target other hotspots, map human rights risks and mitigate issues with specialist country experts.











Fernando García,

Certificadora de Productos Sustenables, Mexico, on labor conditions for farm workers in Mexico and how monitoring is not black and white.

"We have to be more receptive to the real needs of the producers."

ur organization, Certificadora de Productos Sustenables (CPS) has been in the field of sustainability certification in Mexico for the last 15 years. It currently certifies 36 different crops, including vegetable, fruits, flowers and coffee from Baja California to the Yucatan Peninsula. CPS' mission is to establish a certification system in Mexico that contributes to the mitigation of climate change, conserves biodiversity, enhances the profitability of agriculture and promotes the best possible livelihoods for workers. Because of our previous work with the Rainforest Alliance, we were invited by the Nescafé Plan in 2018 to monitor working conditions in compliance with national legislation and international standards for certain clusters of certified coffee farms – 293 medium and large coffee farms (equal or greater than ten hectares) across the producing states of Chiapas and Veracruz.

Our team members visit the coffee farms for an average of two to three hours when the highest number of workers and most families are present at the peak of harvest. We collect information on agricultural practices implemented by the Nescafé Plan and on living and working conditions, compare our findings with previous records and

send our reports to the Nescafé Plan program management. We work in groups of three or four auditors trained in sustainability, conducting interviews with producers, administrators, and any workers that are present at the farms. We tour the work areas and fields.

FOCUS ON HUMAN RIGHTS DUE DILIGENCE

Nestlé has been conducting human rights due diligence for the last ten years based on international standards, including the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises.

We will continue our efforts in this field and we are currently assessing the robustness of our due diligence processes, starting with child labor risks.

We will continue to report transparently on the risks we identify and how we address them, following the highest international standards, such as the Global Reporting Initiative and the UN Guiding Principles Reporting Framework.

We will also continue to call for appropriate legislation that is aimed at encouraging companies to address their potential impacts on human rights and the environment. Our position on Human Rights Due Diligence can be found on our website.







It is important to point out that when we see minors, we conduct detailed interviews to determine whether they are participating in labor activities or only accompanying a family member. We have seen that in some cases, there is a need to improve worker conditions, principally in health and occupational safety, agrochemical handling and equipment. In addition, training on first aid, the contracting of minors and the proper payment of legal minimum wages are topics of concern. In some cases, we review documentation and registries if permitted.

Complex issues for families

Enforcing labor legislation in Mexico is a challenge, especially in rural areas where working as a family is the tradition and economic conditions are precarious. Seasonal coffee workers in the state of Veracruz mainly come from neighboring communities, but in the Chiapas area in the south, more than 90 percent of the workforce come from neighboring Guatemala. Because many feel it is unsafe to leave their children behind in their country, entire families, including children, migrate together. Many years ago, this led to a problem of empty schools in Guatemala; now the school vacation period coincides with Mexico's peak harvest season. Entry into the country is regulated through guest agricultural worker permits by the Mexican government.

The seasonal migration of entire families can lead to overcrowded housing. Minors who arrive with their families are also more vulnerable to child labor, even though their presence is supposed to be restricted to non-working areas. Those farmers who want to avoid such scenarios by not accepting entire families may actually face a labor shortage.

Our monitoring of labor conditions for the Nescafé *Plan* has improved the occupational health and safety of the coffee farms we work with. We have seen an important shift in how farmers are taking greater safety precautions for themselves and their workers, particularly those in 4C units that are protecting themselves from agrochemicals using gloves and face masks. The technical assistance of the Nescafé Plan is of course valued for increasing coffee quality and yields, but we are seeing a change in mentality about sustainability beyond the field. Farmers are analyzing how they will pass their coffee land on to their children and thinking about the kind of opportunities they want them to inherit.

Finding inclusive solutions

I believe the agricultural sector requires greater economic investment and human capital to continue the important work of increasing economic resources and technical training in the field. However, there are important elements that we must not forget and must continue to strengthen. We have to be more receptive to the real needs of the producers and have a better understanding of what their problems are; we need to perform a root-cause analysis of their problems and provide solutions. I have no doubt that certification standards and the integration of better processes have the power to lead farms to new models of sustainable production. I feel very proud that I am able to contribute to helping small producers thrive. 🖊



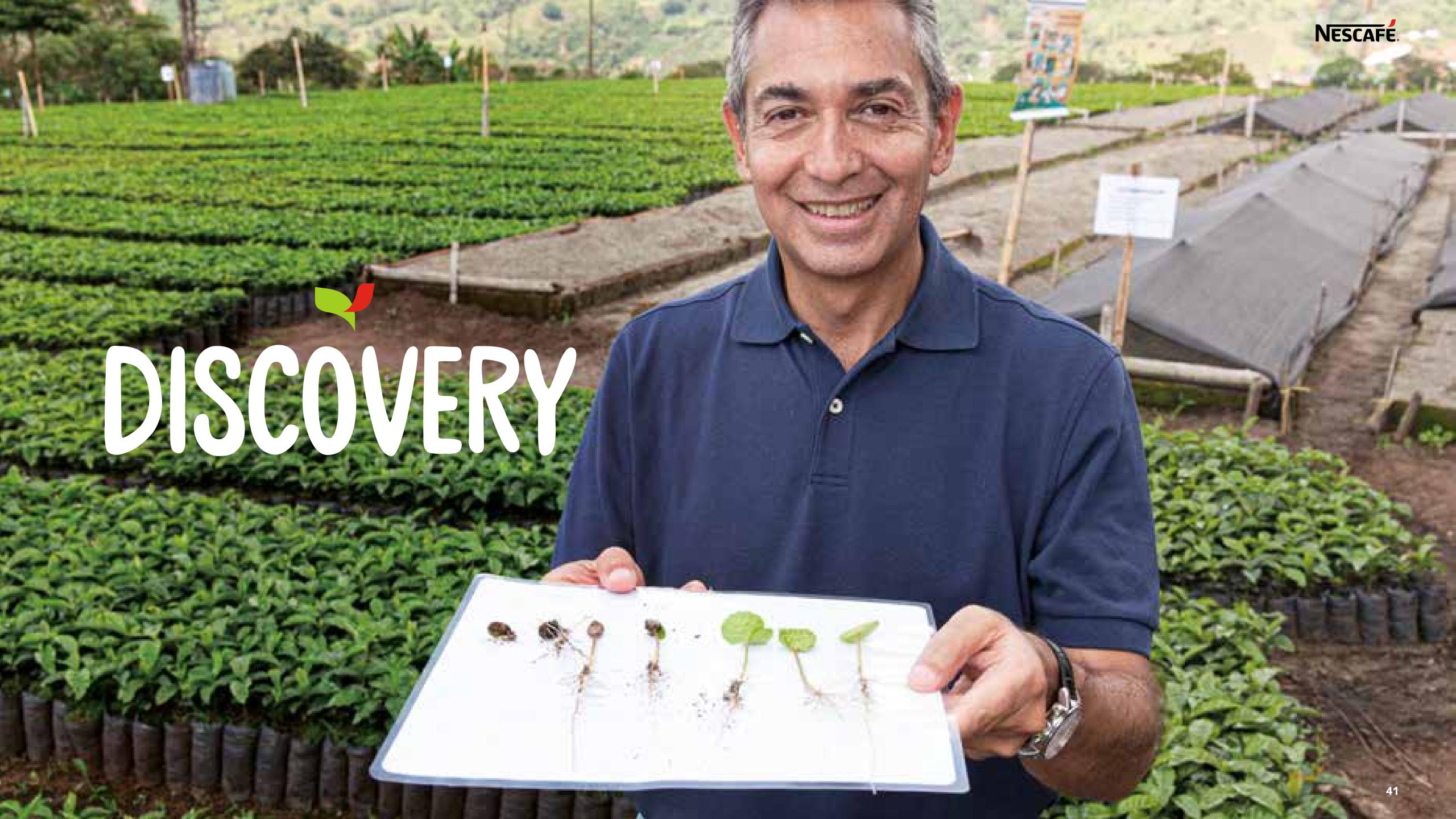


Nine farms within or related to our supply chain were identified as having child-labor risks at the time of CPS' assessments. As a result, five farms were removed from our value chain, while corrective actions were undertaken at the remaining four locations.











PLANT POWER

2355 Coffee plantlets distributed by 2020 to improve the quality, quantity and sustainability of our coffee supply chain

We are working to develop, select and trial stronger Arabica and Robusta plant varieties that can better cope against the threats of climate change, produce higher yields and quality, and improve farmer incomes and livelihoods.

In Tours, France, Nestlé's research greenhouse contains a super-library of genetically diverse coffee varieties that is helping plant scientists to improve their understanding of coffee resilience, productivity and taste – properties that are the key to the future livelihoods of farmers and to delivering value beyond Nescafé. Since its beginning, our Research Center has taken a leading role in developing and selecting next-generation coffee varieties that are more resilient to the impacts of climate change, such as more severe droughts, diseases and pest infestations. These new plants are developed to combine the traits that matter most to farmers: increased resilience, higher yields and improved quality. Selections are bred and tested in trial plots at our experimental farms in Ecuador, Thailand and Côte d'Ivoire. The best performing plants are sent to other coffee-producing countries for trials

under local growing conditions. Once the plants' performance and characteristics are confirmed, the most suitable plant material is registered and made available for distribution to all coffee growers.

Giving farmers a wider and better choice of coffee plants has benefits for everyone along the value chain, from coffee-growing communities to consumers. That's why we work with a number of partners, including national agricultural institutes, with whom we share materials for testing and analysis. We also exchange data and collaborate with international organizations, such as the French Agricultural Research Centre for International Development and World Coffee Research, in an effort to collectively tackle the many challenges that the coffee sector is facing.

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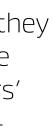




Farmers are at the center of our process for selecting the best plant materials. Through our Agricultural Services team and our local partners, a number of coffee growers around the world receive the very best of our high-performing materials from our experimental farms. We trial the plants with growers on their own farms, and only validate the varieties that work successfully for them. Our approach is to collaborate closely with the growers, and to never push farmers to work with coffee plantlets that they don't want. By working in this way, we can ensure that new varieties are effectively meeting farmers' agronomic, economic and environmental needs whether they produce flavor profiles that have better market value or require less water, making them suitable for farms without modern irrigation. Plant science research is the starting seed for long-term improvement of farmer incomes and livelihoods.















NESTLÉ RESEARCH CENTER, TOURS, FRANCE	EXPERIMENTAL FARMS	COUNTRY-LEVEL TRIALS	FA AC
Function	5 Agronomists	ew 15 OKIGINS r WITH	Fa
Knowledge-building and coordination of breeding programs	80 ha. dedicated to breeding, trials and selection of new coffee varieties		de ma ace
Core collection of coffee trees to preserve genetic diversity	Function	ONGOING	th fa
	Mother garden with core collection	TRIALS OF 26 ARABICA AND 72 ROBUSTA NEW	no
Plant accelerated propagation	Plant breeding program Provision of samples for sensory experts Locations		
Robotics station for physiological testing			
Sensory expertise			
for cup quality	Ecuador: Nanegal	VARIETIES	
Genetics and genomics	(Arabica trials) and Chollo (Robusta trials)	VAINETILO	į,
	Thailand: Tha Sae (Robusta trials)		2
	Côte d'Ivoire: Zambakro (testing drought resistance)		



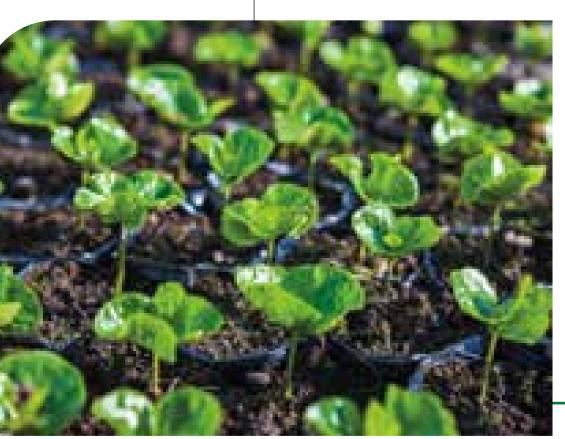


ARMER CCEPTANCE

armer surveys letermine if naterials are cceptable; materials hat do not meet armer criteria are ot released

REGISTRATION

Final performance is validated and only the best varieties are officially registered, released and made available for propagation and distribution to coffee farmers, including those in the *Nescafé Plan* field programs



COFFEE BREEDING

The road to resilience

With our country-level partners, we are conducting ongoing trials of 26 Arabica and 72 Robusta varieties in 15 origins. These varieties are elite performers, taken from hundreds of newly developed plants grown in our experimental farms. This group will be further refined under our extensive testing process to produce a select few varieties. These varieties have the ability to produce yields that are between 25% and 100% higher, depending on local conditions.

It takes two... distant relatives

The wider the genetic diversity of a coffee plant, the greater its resilience. By crossing two genetically distant plants from the same species, we have created more vigorous hybrid plants, while significantly accelerating the available propagation process for commercial use.

Quality is of the essence

Every coffee variety in our trials goes through several years of data analysis and tasting by our experts in Tours. This ensures that the coffee's sensory profile is consistent, since the organoleptic quality can change over the first years of production.







consider myself a very lucky person, because most mornings I wake up in Nestlé's beautiful experimental farm here in Nanegal, Ecuador. It is a very special place. Beyond my barn doors are ten hectares of coffee plants and trees representing more than two decades of agronomy research. My role is to lead the development of new coffee varieties at our stations in this mountainous region as well as the lowlands

Julio Torres,

Nestlé plant scientist, Ecuador, on the discoveries that are shaping coffee farming as we know it. The breeding programs at our farms are focused on creating more resilient generations of coffee materials. My first task of the day is to coordinate with our other agronomists and the 30 workers who help to maintain the farm. I go out into the fields to review our trials, check the plants' condition and any damage, determine what they need and record information. At the end of the day, I review all of our collected data. Currently, we are evaluating 13 Arabica varieties for their tolerance to different regional conditions and ensuring their quality is suitable for the coffee farmers around the world.

These new plant varieties are needed to ensure the future of many coffee growers. Because the plants are more vigorous than any existing commercial variety, they offer farmers the opportunity to increase their income and have a better quality of life. One important benefit is their ability to produce higher yields under local conditions. Efficiency is critical to making farming profitable, especially for smallholders who need to optimize production and costs to enable their families to attain a better standard of living.

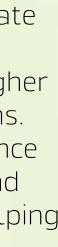


of Chollo, which are respectively suited to grow Arabica and Robusta. The work has been my passion for the last ten years as a member of Nestlé's Plant Science Research team. We are in contact with other research institutions in Ecuador, Central America and Colombia as the knowledge hub for producing countries in our region.



Another focus of our work is making coffee production resilient against the effects of climate change. We need to ensure varieties are more resilient to pests and diseases, can thrive in higher temperatures and can resist longer dry seasons. We also never apply pesticides to our trials, since we are growing varieties that need to withstand the threats of pests and disease, as well as helping farmers reduce or eliminate agrochemicals.







At the same time, we are breeding for good cup quality; that means we are producing sustainable coffee that does not compromise on taste. When we identify top performers, we send the plants to other producing countries to be tested further locally. If they are validated, we register the material with the authorities and start distributing them to the farmers through our *Nescafé* field programs or dedicated partners. These locally registered, improved varieties are also available to any other company or cooperative that is interested in supporting farmers in renovating their farms.

My team's activities depend on the season of the year and follow the crop calendar. For example, right now we are in our Arabica harvesting phase, so we are picking the coffee cherries from the trees and preparing the post-harvesting process. This is also the time we need to focus on tree husbandry so they can recover for the next flowering period. All data is collected and consolidated to facilitate the evaluation of the performance of the material.

Our biggest contribution to Nestlé and the coffee world in the last ten years has been our innovation in plant technology, which has led to a revolution in terms of speed to release newly selected materials to the growers. Plants need time to grow into producing trees, and several generations of offspring are typically needed to achieve genetic stability. Most research institutes working with coffee take 20 to 25 years over four generations to breed, test and market one Arabica variety.

"THESE NEW PLANT VARIETIES ARE NEEDED TO ENSURE THE FUTURE OF MANY COFFEE GROWERS."

Our new varieties are developed only after one generation, making them first-generation (F1) hybrids that contain durable traits of resilience and productivity. We can select the best hybrid, move to the evaluation phase on a real farm, and have a more sustainable variety ready to distribute in different markets within around ten years. The main advantage of these Arabica varieties is that you can easily produce a ton of hybrid seeds at a low cost, achieving 70% cost savings for farmers in Central America, for example. Right now, in Ecuador and Mexico, we are producing F1 Arabica hybrid seeds for the government and farmers.

I enjoy my work immensely in the field. No matter how many years you may have studied this plant, there is always something new you can learn. Every cup of coffee for me is different. There are so many profiles and ranges of flavors. Each climatic and soil condition of a region will produce a coffee with unique taste. It's what I love about the world of coffee. Every day is a new discovery that can be used for the future.







SUPPORT









AND COACHING







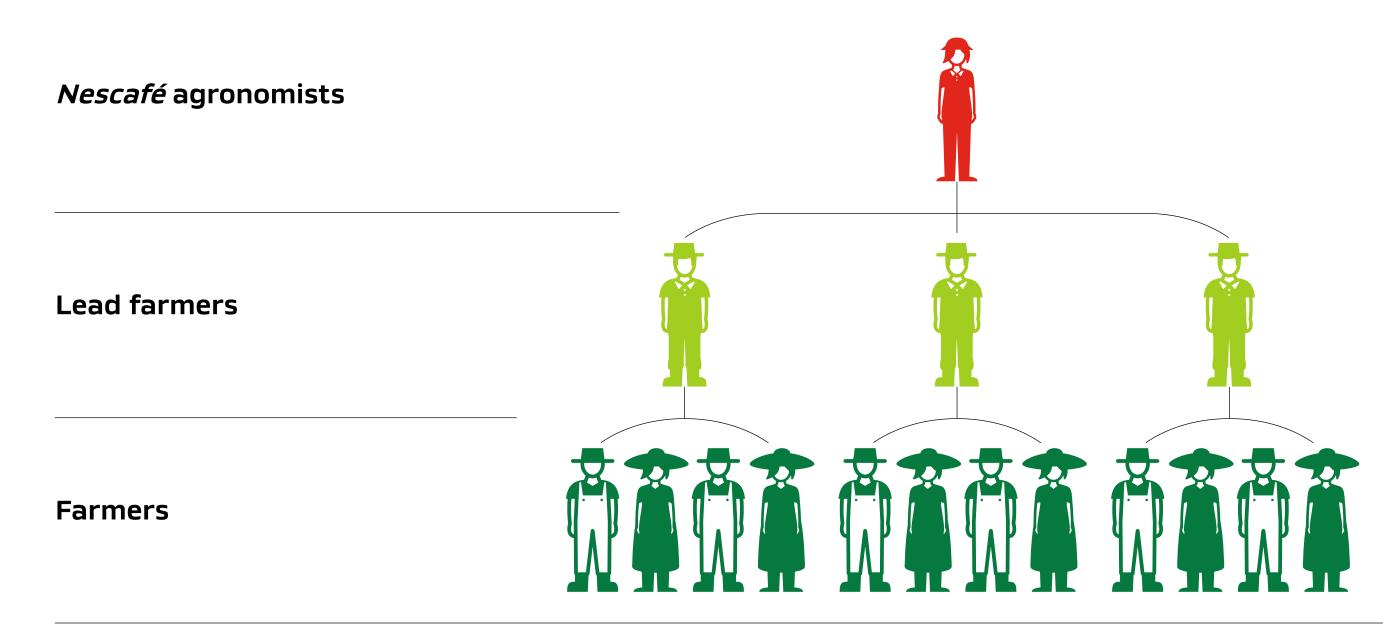


A path towards sustainability

Most coffee farmers tend to own surprisingly small parcels of land – a few hectares at most. Without proper cooperatives or similar farmer organizations, they don't benefit from the economies of scale available to larger farmers. Many have never received formal training, picking the craft up from their relatives and neighbors. Often, things are done a certain way because that is the way they have always been done. But just because something is traditional doesn't mean it is necessarily optimal, especially now that the climate is changing and pressure on arable land is increasing.

Although dealing with climate change is a relatively new phenomenon, Nescafé helping farmers on the ground is not. In fact, we started our first coffee Agricultural Services in 1960 – exactly half a century before the launch of the Nescafé Plan. Our agronomists have always helped farmers adjust to the challenges of the day, whether that is productivity, quality, renovation, diversification, plant disease, drought or soil fertility.

Agronomy is a fascinating science, partly because it touches on topics as wide as plant genetics, soil science, biology and ecology. But also because it has a strong human angle: after all, our agronomists are dealing directly with farmers and their families, contributing to farm economics and household income. All of this requires soft skills and leadership. We value their work so much that in the last decade we have increased the number of our coffee agronomists tenfold.



The Agricultural Services team helps with farmer capacity building and the training process. For example, our agronomists introduce and follow up best practices on everything from pest and disease control to practical issues such as pruning, mulching and harvesting. They also support social issues such as improving farmers' nutrition and food security.

The role of Lead Farmers

To help spread knowledge efficiently and facilitate monitoring, our agronomists often work with a group of selected producers known as Lead Farmers. Lead Farmers serve as peer-guides, coaching and sharing knowledge with other coffee farmers in their communities.



The relationship between the agronomists and the farmers is a close one and not strictly hierarchical. Lead Farmers may not have the same scientific and technical knowledge as the agronomists, but they are highly experienced and well acquainted with the specific local challenges. They very much work together.

The agronomists also work with our R&D team (see page 42) conducting field trials with new coffee varieties – testing the new plants in real-world conditions and working with local government scientific bodies.

Improving yields while simultaneously making coffee more sustainable is not an easy task. But it is an important one, not just for the coffee farmers and *Nescafé*, but for all stakeholders. Nescafé's agronomists play a pivotal role in sharing best practices with coffee farmers, helping them to optimize yields and costs in a sustainable way.









Ngoc Pham Phu, Agricultural Services Department Manager, on challenges in Vietnam's coffee fields and how Agricultural Services is changing its approach to profitability and conservation.

WHEN COFFEE **IS FARMED IN** THE RIGHT WAY - IN A SUSTAINABLE WAY - IT HAS THE POTENTIAL TO BRING MORE BENEFIT AND PROFIT TO FARMERS THAN THE OTHER **POPULAR CROPS HERE."**

"I HAVE ALWAYS

BELIEVED THAT

live in Vietnam's Central Highlands – the Tây Nguyên region. The soil here is a deep, rich brown color – almost red. It's perfect for growing coffee, Robusta in particular.

Although we grow other things in the region like rubber trees, tea and pepper, coffee is the most important crop here. Around 80% of Vietnam's coffee is grown in the region and the sector employs a lot of people. My parents, who are in their nineties now, were coffee farmers, and so am I.

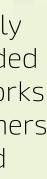
But I am also a Nestlé agronomist – part of the Nestlé Agricultural Services team. I've been involved with coffee professionally since 1983, gaining an MSc in Agriculture more than 30 years ago. I have always believed that when coffee is farmed in the right way - in a sustainable way - it has the potential to bring more benefit and profit to farmers than the other popular crops here, such as rice, rubber, pepper or even durian.





The Agricultural Services team exists to help farmers. As part of that process, we offer a lot of training, technical assistance and coaching. Ultimately, we want to create shared value by helping farmers become more productive, earn more income and produce better quality coffee for consumers in a sustainable way.

We have a very specific and efficient way of organizing training. You see, in Vietnam, we only have eight agronomists. It's a small team, divided across four provinces. But each agronomist works with the support of the most outstanding farmers in each area. There are about 274 of these Lead Farmers in total. This structure works best in Vietnam because most farms here are very small – averaging around two hectares. Even with a large team, we would struggle to reach them all ourselves.









Lead Farmers manage "model" farms and are recognized and respected members of the community. The local farmers know and trust them. They can visit their fields and see how our recommended practices have made a positive difference. I would go so far as to say that most of the practical day-today ideas are actually generated by the Lead

Farmers, and we work together to test, develop and share them. This structure has been helpful in achieving one of our biggest successes to date – reducing water use in irrigation.

Saving water

One of the most important priorities for agriculture in Vietnam is water conservation. Optimally, coffee trees should flower in Vietnam before the onset of the rainy season. Although coffee doesn't always need irrigation, an optimum initial flowering and setting leads to much higher yields. But with longer dry seasons due to climate change, sometimes farmers have little water left. Saving water is not just a farmer livelihood issue – it's a food security issue. A multi-year research project co-financed by Nestlé has done some great analysis of the water footprint of coffee trees, showing that farmers don't need to apply as much irrigation water as they think they do. Farmers used to apply up to 1,000 liters per tree per application. We have managed to prove to them that the trees only need about 400 liters to produce the same yield.

Another benefit is a reduction of costs. Water isn't metered here, and most farmers are pumping water directly from groundwater reserves, or ponds. But they use electric generators to pump. So, by measuring and reducing their water use, they reduce their electricity costs and consumption. The effort means there is more water left over for other crops and local communities. Saving water also ultimately helps protect the natural flora and fauna along the watercourses.

You can't manage what you can't measure

We introduced different systems of water monitoring in Vietnam depending on the size of the farm, the farmers' budget and the kind of irrigation they use. Some can install water meters. A few (but not many) larger farmers have moved towards full precision farming with sensors monitoring soil moisture and pesticide/herbicide levels, with a computer automatically adjusting the irrigation equipment.





"We want to create shared value by helping farmers become more productive, earn more income and produce better quality coffee for consumers in a sustainable way."





For small-scale farmers (who form the majority), we developed and introduced a very simple and effective solution. We learned that an upturned and open plastic water bottle, half-buried directly in the soil near the plants, can offer a reasonable visual gauge of the amount of moisture in the ground.

Seeing that the soil still has moisture, many have managed to stretch the interval between irrigations from 15 days to up to 35 days. Those who have followed our recommendations on shade trees need even less irrigation rounds because the soil naturally retains more moisture. That can allow them to stretch the interval up to 40 days in some cases. Irrigating once every 15 days compared to once every 40 days is a huge difference. We believe that around 80% of the *Nescafé Plan* farmers in Vietnam are now using some form of water measurement, achieving multiple environmental and economic benefits.

For me personally the *Nescafé Plan* program is something I am really proud of – it is exactly what being an agronomist is all about. We are helping farmers and benefiting the environment. My hopes for the future are very simple. I want to help farmers become ever more sustainable and successful.

"I want to help farmers become ever more sustainable and successful. That will benefit them, consumers, local communities and the environment."





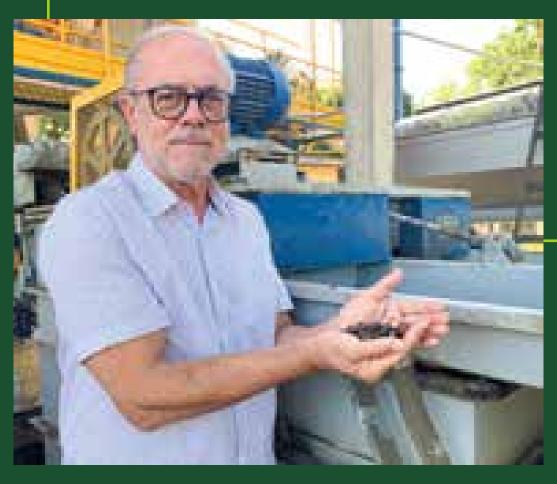
NESCAFÉ FARMER ASSISTANCE IN VIETNAM

Î	8	Agronomists
Ť	274	Lead Farmers
	46м	Plantlets distributed
B	20%	Reduction in chemical fertilizer use which has a positive impact on the environment
	300,000	Farmer trainings conducted
\$	30,000	Farmer contacts per year
\diamond	40%	Less water use in coffee irrigation, between 2014 and 2019
Π	UP TO 54M M ³	Water conserved per year, enough to sustain annual drinking water for about 900,000 people

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"IF WE WANT TO ENABLE SOCIAL SUSTAINABILITY FOR SMALL GROWERS, WE NEED TO **ADDRESS ECONOMIC** SUSTAINABILITY AND THE SYSTEMIC CHALLENGES RELATED **TO FARMER INCOMES."**



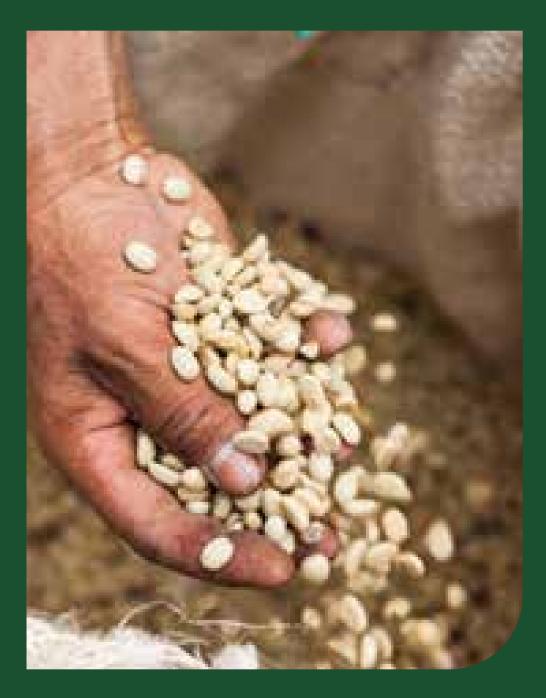
Carlos H. J. Brando,

Director of P&A Marketing, Pinhalense partner, and Chairperson of the Board of the Global Coffee Platform.



In the last ten years, more sustainable coffee than ever has been produced and consumed globally. The pioneering efforts of civil society and sustainability initiatives have been supported and further developed by coffee growers, their institutions and countries, the coffee trade and industry as well as development agencies and donors. However, there is still much to do if we aspire to offer 100% sustainable coffee to consumers. The challenge is particularly important among smallholder coffee growers who have limited access, if any, to technical assistance and training, or to efficient markets for the coffee they produce and the equipment and inputs they buy. If we want to enable social sustainability for this group, we need to address economic sustainability and the systemic challenges related to farmer incomes.

y 35 years dedicated to advancing green coffee processing technology around the world, 25 of which also involving consultancy in areas ranging from coffee harvesting to consumption, put me in contact with supply chain stakeholders in over 50 coffeeproducing countries, gave me interesting insights into the sustainability of coffee production and led me to take on my current position as Chairperson of the board of the Global Coffee Platform (GCP).



A lot of research is underway to define living income in coffee growing. However, a quick calculation of what most growers make today speaks for itself.

In rounded figures, out of USD 200 billion that consumers pay for coffee, USD 20 billion reaches producing countries, and only USD 14 billion effectively reach the 12.5 million coffee farms around the globe. This corresponds to resources of under USD 100 per farm per month! The investments in coffee sustainability worldwide, estimated to be between USD 300 to 350 million annually, do help, but would require a tremendous multiplier effect or leveraging of other resources to make significant change.



\mathcal{D} A CUP WITH AN EXPERT



No silver bullet

The origins of the economic and social sustainability problem are structural, and one key step towards resolution is to increase the share of coffee prices that reaches coffee growers. However, this is no quick fix. It must be addressed now – although results may be mid- or even long term, as explained next.

Share of export price that reaches growers

Coffee-producing countries Vietnam, Brazil and Colombia transfer 85-90% of the export price to growers, yet the average for other producing countries lies in the range of 60-70%. If the countries improved the efficiency of their supply chain – e.g. markets for coffee and inputs, logistics and taxation – to the levels of Vietnam, Brazil and Colombia, their growers could receive up to an additional USD 2 billion per year. The magnitude of this figure is impressive considering the USD 350 million of investments in coffee sustainability per year mentioned before and that UN Sustainable Development Goals advocate, Jeffrey Sachs, proposed a USD 5 billion fund, expandable to USD 10 billion, to support coffee growers towards sustainability.



There are several factors that need to be tackled if we want producers to capture a higher share of the export price. Three key examples are laid out below:



The average number of times coffee changes hands

A multiple-tier coffee trading system with micro, small, mid-size, regional and national level traders from farm gate to export harbor tends to be less efficient than one that has fewer stages but retains competitiveness. Logistics



The cost of logistics is highly affected by the quality of the road and/or railroad system from coffee-producing areas to harbor, and the efficiency of those transport systems.



Burdensome legislation

Legislation may act in several ways to curb the percentage of the export price reaching growers with the most obvious ones being taxes and fees that impact them directly or indirectly.

"The Nescafé Plan is a great example of competitive actions to advance growers' sustainability."



Solutions within the field... and beyond

The average size of the 12.5 million coffee farms around the world is between one and two hectares. This is not big enough to guarantee a decent living income for growers. Put in simpler terms, there are too many people on too little land that, individually, produce too little coffee. Either fewer people should be living off the coffee harvest or incomes need to be increased through diversification. One possibility to diversify income is by growing other products, including through intercropping. But the best option may be to diversify income outside of the farm. Growers and their family members should seek jobs outside of farming, especially urban jobs.

Those who remain on the farms will have to treat coffee growing as a business, with the possibility to manage groups of small farms to gain economies of scale and to add value to coffee with joint milling facilities, purchasing inputs together, sharing the use of equipment and having larger volumes of coffee to sell

This indicates that, whereas we may be seeking solutions for the crisis within the coffee business alone, solutions also belong to the field of regional and national development. The challenge of increasing the very low income of coffee growers has to be addressed with the support of regional economic development policies that go beyond the coffee sector and include employment generation outside coffee farms, especially for young people. In regions where there are better non-farming opportunities, more young people are willing to leave coffee farms.

Increasing the levers of productivity

The proposal above paves the way to adopt the modern technology required to not only increase productivity and improve quality, but also to bring about generational change. Youngsters do not want to stay on the farms to do things the way their parents and grandparents did!

Rather than trying to increase productivity to the average levels of Brazil (in Arabica) and Vietnam (in Robusta), coffee producers should aim to achieve productivity that brings not necessarily the highest coffee volumes but rather the highest return levels using appropriate technology. Although it is usually thought that the prevailing limitation is the availability of technology, the reality is that it is available and the barriers are, in fact, structural; for example, the lack of training and extension services, efficient markets for inputs and equipment, and access to financing, all of which penalize smallholder coffee growers the most.

A coffee environment that empowers and enables

The best way to address these shortcomings is to improve the enabling environment, including extension and training services, efficient markets for inputs, equipment and coffee itself, financing, legislation and logistics. Together these can help increase productivity, and the coffee price that reaches growers and their income itself, thereby increasing coffee growers' economic and social sustainability. This shows that the real solution does not lie within the farm gate alone, but also

NESCAFE

in the business environment between the farm gate and the harbor. It is not a short-term solution but should start to be addressed now.

Government actions play a critical role and can make a large impact on the enabling environment that helps farmers' income to grow. An effective solution to leverage government and private resources may be pre-competitive, multistakeholder platforms involving government, supply chain actors from seed to cup, as well as

donors and civil society. National coffee sustainability platforms, such as the ones the Global Coffee Platform (GCP) is developing in several producing countries, may either lead or support the process to identify bottlenecks, to propose solutions, and to implement them.

The coffee industry, international and origin-based coffee traders, coffee growers and cooperatives, as well as supply chain associations and governments in producing countries, are all involved in GCP pre-competitive efforts to promote sustainability at all levels. In addition, the private sector also invests important resources and funds competitively in sustainable coffee production. Nestlé is a member of GCP and the Nescafé Plan is a great example of competitive actions to advance growers' sustainability. 📕











THE BUSINESS OF FARMING







A ROAD TO ECONOMIC EMPOWERMENT

FARMER BUSINESS SCHOOLS



A targeted approach

The Farmer Business School targets younger and committed farmers with entrepreneurial potential. The concept is already implemented in Southeast Asia, Mexico and other origin countries.



Adding up value

Many farmers are unaware of how to calculate their production costs per kilogram of coffee and their net income. By equipping them with stronger financial skills, farmers can budget more effectively, better allocate their resources throughout the year and increase their profitability.



Tangible results

In the Philippines, participants in the Farmer Business School more than doubled their net farm income from 2018 to 2019. Part of this result is due to a poor crop year in 2018, but we are confident that the business skills will continue helping farmers for years to come.

At most coffee farms, the harvest season arrives once a year when coffee cherries turn deep red in color, indicating they are ripe and ready to be picked. As a cash crop, many smallholder farmers rely on the hard work from this single harvest to sustain their livelihoods. However, low coffee prices and rising production costs in the last decade have added to the challenges of maximizing its value.

Per-hectare and per-tree, coffee farming is becoming more expensive, partly due to poor yields and higher labor costs, and in part as a result of the rising price of inputs. If there is not enough money to care for the farm, yield and quality suffer in the long term, and inevitably incomes are affected, too.

Farmers are increasingly confronting a gap between their actual net income and a *living* income – one which ensures a decent standard of living for a household, including sufficient food, adequate housing, healthcare and transport, access to food, water and education, as well as provisions for unexpected events, such as natural disasters. Yet, most coffee farmers have never been trained in farm management and financial planning. To support them, the Nescafé Plan has taken an active role in helping producers



The *Nescafé Plan* is helping coffee producers to maximize value from their farms and learn incomegenerating skills for a better future.

to manage their farm and finances by providing farmers business trainings through Farmer Business Schools around the world.

One example is the Coffee+ partnership with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), where the Farmer Business School program is targeting 10,500 smallholder coffee farmers in Indonesia, Thailand and the Philippines to help them manage their farms as small businesses and increase entrepreneurship. The concept was adapted from successful GIZ initiatives in the cocoa-growing regions of West Africa.

The 12 different modules taught by GIZ, Nestlé agronomists and selected Lead Farmers cover practical skills that help farmers optimize their business costs and improve incomes. These include basic farm planning, diversification, profit and loss calculations, and the development of other potential revenue streams during the year. Personal finance is also addressed, as farmers often may not have bank accounts or keep good household records.



NUMBERS OF FARMERS TARGETED BY THE FARMER BUSINESS SCHOOL IN SOUTHEAST ASIA



The Nescafé Plan, through the Coffee+ partnership, is also teaching farmers that they do not have to run their businesses alone. Farmer groups can become important support systems where combined knowledge and experience have potential to increase purchasing and bargaining power and help achieve common goals, such as getting access to better financial services or more competitive prices for agricultural products and machinery.

Finally, entrepreneurship has the ability to empower farmers to expand their roles along the value chain and capture more profit. Helping farmers evolve into agri-business, by learning how to manage their farm like a proper business, can be a powerful pathway to economic independence, with the added benefit of job creation in the community. In this way, the Farmer Business Schools and agro-training in origin countries are helping to transform models of economic improvement, so that farmers can make investments and savings for the future, boost household incomes and improve livelihoods for their families and their communities. 🖊

A LIVING INCOME FOR COFFEE FARMERS

We strongly believe that coffee farmers should earn a sufficient income to maintain a decent standard of living for them and their families. Enabling farmers to earn enough money to at least cover the costs of a decent standard of living for their households - including food, housing, education, essential items and unexpected events – needs to be part of any successful sustainability strategy.

Over the past ten years, the *Nescafé Plan* has focused on a number of field actions that improve farm economics by producing better yields and lowering production costs. Our Impact Assessments, carried out with the Rainforest Alliance, are giving us more visibility on the impact of these interventions on farmers' income and the Living Income gap.

But we also need to go further to understand how farmers earn their living from other sources, the systemic challenges that they face and their economic realities.



This means considering a range of other benchmarks, including measuring household income beyond coffee, from both farming or off-farm, as well as gathering insights on national and/or regional costs of living for a typical household.

We embrace this challenge, but also recognize how important it is to address it collectively. That is why we are actively engaged at the sector level on collaborative activities with the International Coffee Organization (ICO) Living Income Workgroup. The public-private taskforce aims to collectively establish Living Income methodologies and benchmarks for all coffee origins, and to develop pilot projects to test and learn from targeted interventions. The ICO taskforce has a key role to play in building the long-term sustainability of coffee farming – and in driving sector-wide actions to close the living income gap once and for all.







THE BUSINESS OF FARMING

Ayrton Caballero,

Farmer and agripreneur, Veracruz, Mexico, on the *Nescafé Plan's* impact on his family business and community – and the ties that keep him to coffee.



remember riding on the back of a horse with my grandfather through the coffee fields. Out of all my memories, it is my favorite one, because being close to my grandfather meant so much to me. Jose Inés Caballero inspired our entire family, and he gave us a path to follow in his footsteps. When I came home from school, another education awaited me in the countryside. I was taught to value my environment, my schooling, and also money, because it was something you had to gain over time and it did not come instantly.

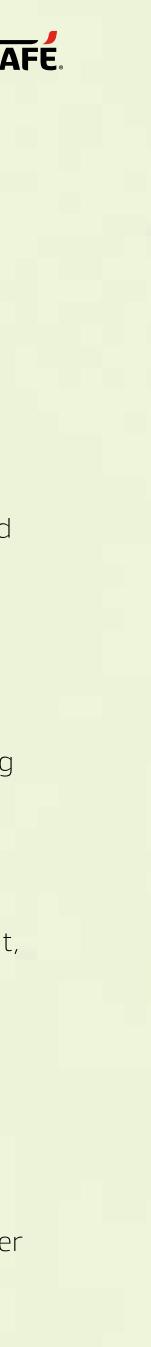
That was a lesson that my grandfather taught all of us. His own father, Juan Caballero Sánchez, was a first-generation coffee farmer. My grandfather had a vision for bettering his life and that of other producers, despite the hardship of low coffee prices. He was the head of his Beneficio Social, a coffee growers group which is self-governed. The growers united in search of securing a better price, which led my grandfather to reach out to Nestlé. Nestlé agreed to buy coffee from the Beneficio in 1997, and from there a collaboration was born with the producers from Tezonapa. The relationship endures to this day. In 2005 my grandfather bought a coffee mill to process the area's crop, and he sold the coffee to Nestlé. In 2010 he was invited to Mexico City to launch the *Nescafé Plan*.

The Nescafé Plan has had a powerful impact on our production and quality here in Tezonapa. Coffee trees in this region are tall, and they grow from two to three meters. Nescafé agronomists helped us to improve our yields by supplying us with smaller hybrid plants. Where 600–700 plants could fit in a single hectare, we could now fit 1,200–1,300, practically doubling our production on the same land. Another benefit was the yield timing. The older plants took up to three years to produce, incurring a large risk if something went wrong, but these newer plants started producing after just one year.

Growing alongside our producers

Our family business Cafés Paraíso was created in 2012. It engages producers to plant these improved hybrids from Nestlé at our nursery and bring them to their farms when they are grown. They do not have to pay for any plants until after the harvest, when they have the means. We started with 50–70 producers, and now we work with 300–400 producers who harvest the coffee, dry it and deliver to us. We are able to pay the same day, which together with increasing confidence in the coffee trees, has been why we have been able to grow as an enterprise. Once the coffee is milled, we sell it on to Nestlé.

Last year was the driest season we had ever seen. We had four and a half months of drought, and it was the first time that climate change really affected us. Producers here in Tezonapa depend 100% on the climate, because most do not have irrigation and water conservation systems. The producers were grateful because one of the characteristics of the new plants is that they are more resistant to heat and are grown in the shade. As a result, they were able to rescue 60–70% of their production, when other producers lost the majority of their harvest.





"I'M A MEMBER OF THE FOURTH **GENERATION IN COFFEE**, AND AT 24 YEARS OLD, I AM CONTINUING THE TRADITION. "

Smallholder farmers make up most of our producers here, and the Nescafé Plan has shown a commitment to them from the beginning. Every year, once the harvest is over and producers have more free time, Nestlé holds a meeting with them to share best practices. They have assisted with our soil quality, which tends to be acidic when shifting sugar cane production to coffee. During the harvest, technicians are always accessible if there are problems with pests or diseases.

A family tradition

My grandfather is no longer alive, but we have held onto his legacy. We are made up of 35 Caballero family members in the business, including grandchildren, cousins, aunts and uncles. I'm a member of the fourth generation in coffee, and at 24 years old I am continuing the tradition. I primarily take charge of checking coffee quality and working with documentation and traceability, which is part of our sustainability credentials as a 4C member. I believe we need to teach the next generation to continue being coffee growers, because we cannot talk about coffee or hope to sell coffee, if we don't know it. We need to balance this education with helping our families. I have a university degree as a public accountant, but that doesn't mean I have to make a choice to let go of the family farm. I am going to fertilize it, prune it, and I am going to water the soil.

Many of the pressures faced by our coffee producers have to do with the lack of investment and economic support to make the sector profitable. Producers also lack education on the financial aspect of the business, such as how much they are gaining or losing, and how to receive the best price after money is divided between one trader and another. There are individual buyers who take advantage of them. This is also where we see the benefits of capacity building from Nescafé.

Our family shares the same vision for helping our producers to grow; one of our greatest achievements at Cafés Paraíso has been to give a fair price to our producers. In the future, we also hope to continue growing alongside Nestlé. We are now investing in new machinery that will increase our capacity and the quality of our coffee. We would like to engage more strongly with the company to work without intermediaries and continue uplifting this region.

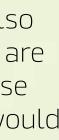
Coffee is a good product and a healthy product, and it has filled my family with love. We say we are a family with a "coffee aroma." Our challenge at Cafés Paraíso is to remain together on this path, united by the values that my grandfather passed down to us. 🖊

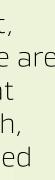


















We believe that women's socio-economic empowerment is a force for good. It is central to gender equality, it improves households and community prosperity and it has multiple additional social benefits.



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SUPPORTING WOMEN FARMERS IN EAST AFRICA



Women empowerment programs: Kenya and Rwanda

In Kenya, women coffee farmers have never had it easy. From the moment they wake up to the time they go to bed there is always something that needs their attention. From gathering and carrying firewood or water to looking after the children, cooking all the meals and feeding any livestock, the workload is endless. This would be challenging enough on its own, but most also work for hours every day on family farms: weeding, pruning, spraying and harvesting. Hard physical labor that often remains invisible. Rarely, though, do they earn any money of their own.

This lack of socio-economic empowerment is a problem on a number of levels. Girls drop out of school and marry young to older men who promise to look after them. This is not only detrimental to their own education, but likely also to their children's. Even from this example alone, it is clear that women's empowerment activities are at the core of addressing a range of other social and environmental issues.

"IT'S ALSO ABOUT WHAT ISN'T DONE. IT'S THE GIRL WHO DOESN'T LEAVE SCHOOL EARLY, THE CHILDREN WHO DON'T END UP WORKING IN THE FIELD."

In 2012, two years after we launched the Nescafé *Plan,* we began working with Kenyan-based organization, Coffee Management Services (CMS), to address this issue. Together, we are providing women farmers with specialist training covering farming best practices, agripreneurship and leadership. We do the latter because another key part of our strategy is ensuring that women have leadership positions in the farmer groups and on the boards of their local farmer organizations. We are also helping women to get opportunities to work in traditionally male-dominated areas of production, such as the coffee washing stations.

We have reached 8,500 women and are targeting 18,000 households by the end of 2021. There is a lot of work still to do but we are highly motivated to keep going because we can see the impact the program can have. The potential benefit - not just to the women themselves, but to their children and grandchildren – is immeasurable. It isn't just what is done, such as earning more income and having a greater say in decision making. It's what isn't done. It's the girl who doesn't leave school early because she can see a different future. It's the children who don't end up working in the fields because their mother can afford to buy them books and school

uniforms. It's the family that doesn't go without between coffee harvests because income and nutritional sources are diversified.

This is why our program in Kenya is so important, why we are committed to it for the long term and why we are focused on having a deeper impact here rather than spreading ourselves too thinly over multiple countries.



NESCAFÉ

"Gender equality is not only a fundamental human right but a necessary foundation for a peaceful, prosperous and sustainable world"

United Nations Sustainable Development Goals

Years of our Kenyan women's economic empowerment program

Lead Women Promoter Farmers trained in leadership and financial literacy

Women farmers trained in agronomic and agripreneurship best practices (including financial literacy and organization governance)

Households targeted









Expanding to Rwanda

With the same mindset, in 2016, we felt ready to launch a sister program in Rwanda. The situation on the ground here is notably different than in Kenya. Within the regional context, Rwanda is quite progressive. In fact, women (either individually or jointly with their husbands) own around half the agricultural land in the country. The majority of parliamentarians are also women. So, gender is very much on the agenda here. But this is a relatively new and delicate blossoming. It needs to be nurtured.

Again, we didn't try to go it alone. We teamed up with the Kahawatu Foundation, which was launched by one of our suppliers, Sucafina. We realized we could be more impactful by working together, pooling resources and expertise, rather than having separate, competing programs.

On the ground, the Kahawatu Foundation offers women training in good agricultural practices, helping them to make coffee farming more profitable. We teach them how to get more yield, so they can sell and earn more. We encourage them to diversify their crops to ensure food security for their families, create alternative revenue streams and reduce their exposure to global coffee prices. We also provide training in health, hygiene, family planning and other social training for women and young people.

Finally, we offer them crucial training on financial literacy, record keeping and household economic planning as well. This is especially important as not everyone here completes secondary school (whether male or female). We teach them that growing coffee isn't just about working the land. It's about business skills too.

We also organize our courses through farmer groups – ensuring that every group has a dedicated female and youth representative (see page 69 for more information on our youth programs). This is a public display of support for women's empowerment and it ensures that women's voices are heard within farmer groups. So far, we have reached well over three thousand women farmers in Rwanda.

A change is already in the air for women in Rwanda – a change that we very much support.



NESCAFÉ

Rwandan women's empowerment program

our Rwandan program

Women in leadership producer organizations thanks to the program



"It is fantastic to see Nestlé taking the long-term view. It has allowed us to focus on specific communities since 2016 and to develop very real continuity at a community level over that time."

Justin Archer, SUCAFINA East Africa COO & Group Sustainability Manager







THE IMPORTANCE OF NUTRITION

Coffee monocrops are not the best option. They limit biodiversity, deplete soils, leave farmers exposed to fluctuations in world coffee prices and don't help to support healthy nutrition. Nor are they necessary. Coffee loves being surrounded by other plants. That's why, across various programs, including our women's economic empowerment program in Rwanda, we encourage women farmers to diversify a portion of their production, introducing other food crops such as beans, maize, potatoes, tomatoes and onions.

Apart from being a staple of the local diet, beans (in particular) combine well with coffee in a way that is good for the soil. They help with nitrogen capture, reducing the need for fertilizers, which in turn reduces input costs for the farmers and supports biodiversity.

But there is an enormous nutritional component to this too. We don't just want healthy trees. We want healthy, well-nourished farmers. By diversifying their crops, farmers improve their food security, reduce household costs and add variety to their diets. Any surplus grown can be sold at market, providing extra income.

Along with the shade trees, we encourage farmers to plant other crops. This approach to farming helps to protect against climate change and creates a virtuous cycle: better coffee, better incomes, better nutrition and a better environment.







WOMEN IN COFFEE

"I have big hopes that thanks to coffee I will be able to pay for my children's education until they all finish their studies."

Dorotée Uwimbabazi, Coffee Farmer, Rwanda, on learning how to harvest coffee more sustainably and making the economics work for her family.











grew up with coffee. I live in the mountains not far from Lake Kivu in the village of Kiguri, in Nyamyumba, northwestern Rwanda. It is a poor area. But my family were not as poor as some others because my parents were coffee farmers.

I used to help my parents with harvesting and processing their coffee. After selling it, they were able to take good care of us. That made me realize, even as a child, that coffee is important. So later, when I first got married, and we found that we were poor, that is when we decided to find money to buy land with coffee trees. Now we live in a better house, which we are improving step by step. We have better standards of living and we always eat well. We are happy because of coffee.

My husband is a security guard. He is away from home a lot. But he helps me on the farm indirectly because he pays for the laborers who assist me. People from other places are sometimes surprised, but in Rwanda, many women are engaged in coffee farming and trading. I know lots of other female coffee farmers in our producer organization.

I am sometimes asked whether there are specific challenges women farmers face or if there are differences between men and women farmers. I say it's true that there is a specific physical challenge in pruning and carrying a spray machine on your back. That can be hard for us women. But on the other hand, I think women are more focused than men when it comes to attending the training sessions offered to us. So, women tend to use better farming practices than men. We also tend to spend the money we earn more wisely, for the benefit of the whole household.

Learning the trade

When we started out farming, our yield per tree was low – too low for us to be happy. I didn't know how to mulch and weed and so they were not part of my farming practices. But in 2016 our producer organization began working with the Kahawatu Foundation. They worked through our Lead Farmers and brought in agronomists to train us.

We learnt how to prune, weed, mulch and harvest quality cherries and how to safely apply agroinputs. They followed up with us and encouraged us to put everything into practice. We also learnt how to plan well and reinvest the income from coffee because it is a plant that only produces cherries once a year. We need to plan for hiring labor, for buying materials and for harvesting the next season as I and my husband cannot do all the activities required by ourselves.

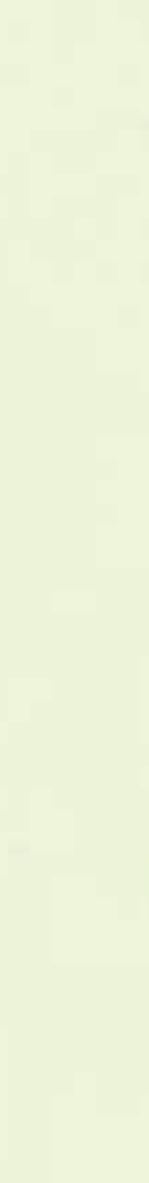
Before working with Kahawatu I was producing 500 kilograms or less from 700 coffee trees. Now I'm expecting to produce around 600 kilograms. We've made a number of changes. I've learned to prune coffee trees and I've planted shade trees



in my garden. They also contribute to mulching when they shed their leaves. I think they have made my garden one of the best in our community.

Over the last couple of years, I have used the extra money from the coffee harvest to buy five goats, six bags of cement to build a new house and ten iron sheets to renovate the roof. The goats are a good investment because we can either eat or sell them. I have also bought some more land where I now grow 200 more coffee trees. These new trees are very productive and I will start harvesting from them in 2020. I have always grown other crops like tomatoes, cassava, soya beans and cucumber, and I still do.

"MAYBE IT'S HARD FOR YOU TO UNDERSTAND WHEN YOU CAN'T SEE IT, BUT I AM A HAPPY WOMAN IN A HAPPY HOME BECAUSE OF COFFEE."







Challenges remain

We always share the information we get from the Kahawatu Foundation with the rest of the community. Of course, we all still face challenges. Especially a lack of enough equipment for pruning and spraying. Not getting fertilizers on time is another problem. And having enough money to hire people to help with pruning is a challenge shared by both women and men alike. We also need to be supported with enough on-farm equipment which is lacking. This way women will feel empowered and will be able to apply good agricultural practices at their coffee gardens.

The Kahawatu Foundation is helping to make us better farmers. But the real benefits of partnering with them is that it has enabled me to take care of my children's wellbeing. I've been able to buy them clothes and pay for them to go to school. Three of my four children go to school at the moment (the fourth is still just a baby). But I have big hopes that thanks to coffee I will be able to pay for their education until they all finish their studies. Maybe it's hard for you to understand when you can't see it, but I am a happy woman in a happy home because of coffee.





FARMERS FUTURE







The *Nescafé* Youth Initiative is aimed at inspiring younger generations to contribute to the success of their coffee-growing communities.

Nestled in the verdant foothills of Comayagua, Honduras, is a classroom where young people are receiving a new kind of education. An array of coffee makers of all types – espresso, drip coffee, single serve, cold brew, French press - can be found alongside a preparation area where students are learning about coffee properties, extraction methods, roasting, grinding and cup tasting. A plant nursery and a solar drier are located on the grounds where hands-on lessons about cultivation and harvesting come to life. For many of the participants, even those who come from families of coffee growers, the experience is shedding a new light on this commodity as a quality product and a sustainable source of income for the future.







-10000

Young people to be trained in

This Coffee Quality Competence Center in the municipality of La Libertad was launched by Nescafé in June 2019, in parallel with the inauguration of *Nescafé's* Youth Initiative in Honduras. A collaboration with the national government, as well as partners such as the Fundación Co. Honducafé and Organización Internacional de Juventud, the program provides 80 hours of training for young people interested in coffee and entrepreneurship. Here young men and women learn basic knowledge of coffee production, good agricultural practices and product quality, but also digital skills, business acumen and valuable self-confidence, which will improve their chances of getting a job and could help them to start their own enterprises. The initiative is part of Nestlé's wider commitment to help ten million young people worldwide to access economic opportunities by 2030.

In many parts of the world, the average age of farmers is increasing, despite the fact that young people make up the largest proportion of the populations in question.

With low coffee prices, smaller parcels of inherited land and the unreliability of income due to the frequency and length of droughts, floods and plant diseases, young people increasingly see coffee production as an activity of high risk and low reward. Globalization has paved the way for other economic opportunities, resulting in young people leaving their rural communities and seeking better wages and less physically demanding work in cities.

However, Honduras is an outlier. Coffee farmers are actually getting younger – <u>the average age</u>, 46, is ten years younger than it was a decade ago. Its specialty coffee industry has seen dramatic growth since the beginning of the 21st century, and coffee is now Honduras' main agricultural export. This means that there is plenty of potential in the sector for Honduras' young people.

Honduras by 2025

The Youth Initiative plays a critical role in mentoring and equipping this next generation with savvier land management skills, enhanced cultivation technology, methods to safeguard against climate change and more knowledge on product quality to maximize capital. Young people need all the support they can get to achieve this vision and be inspired to grow as entrepreneurs. As a result, the Nescafé Plan has made a commitment to train up to 25,000 young people in Honduras in the next five years as the Youth Initiative scales up and expands its Coffee Quality Competence Centers in the country. Other knowledge is being shared through our coffee sector trainings that are being provided by the Nescafé Plan in Mexico, Colombia and Brazil. By engaging with young people, we are unlocking their capacity for creativity and innovation to build more sustainable coffee growing models, uplift coffee production and foster the next generation of leaders in coffee communities.







WHY THE NESCAFÉ YOUTH INITIATIVE?

A generation gap worth filling

Coffee production cultivation is reaching a critical stage in many countries due to a shortage of young growers. Less than 5% of farmers in agriculture are under the age of 35 worldwide. The average age of coffee farmers around the world is over 50; in Africa, it is over 60.

Giving young people a reason to stay on the farm

Changing the way coffee farming is both practised and perceived is fundamental to attracting young people to the sector. The *Nescafé* Youth Initiative is an important step to demonstrate that coffee farming can be both profitable and fulfilling, thanks to capacity building and better access to inputs for production.

Tapping into the potential of young people in Honduras

Young people make up the majority of the population in Honduras. Approximately 65% of the population is below the age of 29, half of whom are living in rural areas (latest available census data, 2013). Identifying areas for upskilling and investment is critical for this demographic. Our program training intentionally reaches beyond coffee production to include nutrition, health, barista skills and tasting, which have the potential to prepare young people for employment opportunities across the entire coffee value chain.



Changing the way coffee farming is both practiced and perceived is fundamental to attracting young people to the sector.







César Ernesto Buezo, Nescafé Youth Initiative graduate, age 17, Honduras, on his experience in the program with other members of his generation and the future he can see for himself.

ut of my eight brothers and sisters, I'm known as the one who plans the most. Ever since I was young, I used to dream of who I would become and the goals I might reach. Here in Comayagua, I knew that coffee was my future. Our region in Honduras is well known for grain agriculture, livestock, and of course, coffee. I grew up on a coffee plantation. Coffee is part of my family and our everyday lives.



"Coffee is something that many young people see as obsolete... I had always looked at coffee as something you sell, but now I understand how coffee can be much more."

> I studied agroforestry in high school. During my last year, in 2019, our class was given the opportunity to participate in the Youth Initiative to study the quality and production of coffee. Other high schools were invited from our area. Not everyone wanted to do it. We still had to study, others had to work on the weekends, and classes were held in a neighboring rural town that required travel. But the program was free of charge and all the meals were included. Our teachers were very good, and we didn't have empty stomachs to complain about.

"EVER SINCE I WAS A CHILD, I USED TO DREAM OF WHO I WOULD BECOME AND THE GOALS I MIGHT REACH."

Learning new skills

Classes were taught in different modules over a period of six months. In the farm module, we learned about the importance of good tree husbandry, the processes that the cherries undergo and the rigorous care needed for the coffee trees and the harvest. We learned methods to improve coffee quality and engineering techniques to measure farmland. We received additional computer education, which helped because many of us only have access to basic programs. In our barista module, we were taught how to mix different coffee drinks.

We made friends. We had fun. One of our best modules was about motivation and perseverance. That really resonated, because we were all balancing the stresses of home and school. We had excellent talks about leadership, innovation and entrepreneurship. It was incredible to feel the support of people who did not ask for anything in return – they genuinely wanted to help us and be involved. That really motivated me to keep going!

Coffee for our generation

I never imagined I would have an opportunity to be with other young people in a worldwide initiative. Most of us come from coffee producing families, but the challenge is that we inherit land along with other grandchildren, children and cousins. We know that the coffee tree demands a certain climate, a certain soil and a certain locality, but we lack theoretical and practical training when it comes to farm management. We let older people worry about it, and production has declined. Coffee is something that many young people see as obsolete.

I live in an area that is recognized for coffee, The Youth Initiative gave us an entirely different and yet producers do not have the same level of perspective. We realized that we weren't actually experience with quality and production. I feel a producing the best way we could. The biggest commitment to society to do something. If I can breakthrough for me was the simple act of noticing help my town, this is what I will do. I would also the cup of coffee that I was producing: testing it, like to diversify to have different crops, so that tasting the different flavors, studying colors and our economy can keep growing. I think about texture... this was all entirely new. I had always a future in coffee, but not just in terms of an looked at coffee as something you sell, but now income. It's a culture, a patrimony, an inheritance, I understand how coffee can be much more. Now and our family. It will always form a part of me that I am at university, and thanks to the program, and our community. The difference is, I don't feel I have to be bound by tradition. I have a different vision of what I want for my farm.











COLLABORATION



COLLABORATION

PARTNERSHIPS FOR A STRONGER AND MORE SUSTAINABLE SECTOR

Alongside our external partners, we are building synergies, sharing knowledge, improving actions and building scale to deliver longlasting solutions.

Ensuring responsibly sourced and sustainable coffee supplies and improving the livelihoods of farmers in rural communities is not a task that can be handled alone. Businesses, governments, public institutions, civil society, communities and farming organizations all need one another to help smallholder coffee growers overcome systemic and interrelated challenges that may negatively impact social and environmental outcomes and affect sustainable development.

We need to keep growing and building on what we achieve, and move the sector in the right direction. It's the reason why we collaborate with public and private partners at every stage of the Nescafé Plan. By exchanging knowledge, combining research and resources, sharing innovations and collectively enforcing standards, we can coordinate our strengths to deliver positive impact.

Individual partnerships are invaluable to strengthening the Nescafé Plan and to scaling our activities. They bring geographical knowledge and particular subject expertise to all of our programs. Their know-how and skills are diverse: our close

collaboration with research institutes is helping us services (public health or education in rural to ensure that our improved coffee varieties are communities, finance services, etc.), are systemic resilient and are performing under local conditions. by nature and cannot be solved by one stakeholder alone. *Nescafé* actively participates in a number With support from our field partners, we reach thousands of farmers in remote locations, delivering of national and global multi-stakeholder platforms training and technical assistance on good practices, which bring together roasters, traders, NGOs, assessing impacts and supporting communities. governments, donors and producers to discuss challenges and opportunities, share experiences Other organizations and government initiatives reinforce the investment in and engagement with and develop multilateral plans of action. Collective young people to create opportunities in coffee partnerships, such as the Global Coffee Platform, farming. Partners can also bring joint funding to allow us to align on critical areas of impact and help us pilot and strengthen development initiatives promote an enabling coffee environment where farmers can thrive. to address rural community needs. We have built trust with these partners over many years and Joint actions that involve the private sector, civil continue to listen, learn, adjust and expand our society and governments, such the International activities thanks to their expertise and support. Coffee Organization Public-Private Task Force, can facilitate unique systemic improvements to **Collective action** the coffee sector.

Beyond working with partners in our own supply chain, we also need collective action at the landscape and sector levels. This broader collaboration is essential because deeply rooted issues such as the lack of access to essential

We know there is much work ahead. But by combining our forces, we will continue to drive transformational change to positively impact coffee growers, communities and the planet, while bringing 100% sustainable coffee to consumers. 🖊







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Dr. Nguyen Do Anh Tuan - Director of the International Cooperation Department, Ministry of Agriculture and Rural Development (MARD) and Director of the Partnership for Sustainable Agriculture Vietnam (PSAV) – on Vietnam's goals for sustainable coffee and how partners are essential to achieving them.

"Vietnam's coffee stakeholders across the public, private and producer sectors must work together in order to increase the value of coffee and support sustainable development."



In 2010, the Government of Vietnam's Ministry of Agriculture and Rural Development (MARD), in collaboration with the World Economic Forum, established a Public-Private Partnership (PPP) Task Force for various agricultural commodities. The Coffee Task Force is co-chaired by the Department of Crop Production and Nestlé Vietnam. It consists of 22 stakeholders, including global roasters, coffee traders, agro-input companies, certification bodies, development and financial institutions, research centers and government departments. Working together collaboratively, the Task Force invests in the whole coffee value chain to improve

productivity and quality, farmer income and environmental sustainability.

Coffee is one of the key agricultural products of Vietnam and more specifically of the Central Highlands region. Each year, Vietnam exports about 1.5 metric tons of green coffee beans, which accounts for 90% of the annual domestic coffee output and for 3% of annual GDP. Coffee produced in Vietnam is consumed in more than 80 countries. For many years, Vietnam has been the second largest coffee exporter and the top Robusta coffee producer in the world. The sector creates jobs and stable incomes for more than 600,000 farming households, driving socio-economic development and reducing poverty, especially within the ethnic minority communities of the Central Highlands and other upland regions.

In recent years with lower coffee prices, Vietnam and its coffee communities have suffered a substantial decline of income, impacting negatively on farmer livelihoods. Low coffee prices, in turn, are threatening the long-term sustainability of the coffee sector with lower adoption of quality and sustainability standards, retaining young people and the conversion of coffee to other more profitable crops such as fruits and pepper. The negative effects of climate change, such as higher temperatures, water scarcity and extreme weather conditions, are also being felt. In 2016, a drought in the Central Highlands resulted in a nearly 30% production loss.





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In 2019, heavy floods and a prolonged rain season had a negative crop quality impact.

MARD and local authorities have issued several preferential policies and launched a number of important projects to address the main challenges faced by coffee growers in developing a sustainable coffee industry, and to promote Vietnam's coffee export market. One of the most important and longstanding initiatives is the partnership with the Nescafé Plan through the Provincial Agriculture Extension Centers (PAEC) and the Western Highland Agriculture and Forestry Science Institute (WASI). In the last ten years, Nestlé agronomists together with PAEC employees have provided training to over 230,000 coffee farmers on best farming practices in the provinces of Lam Dong, Dak Lak, Dak Nong and Gia Lai.

The program has equipped coffee farmers with knowledge and proper techniques to improve bean quality in a more sustainable manner. They have also developed farmers' soft skills and are sharing market information so that farmers can become familiar with the global value chain. More than 274 farmer group leaders are sharing their success and experiences with fellow farmers and with PAEC specialists. The results from this partnership have yielded long-term benefits for farmers, communities and the environment:



More than 21,000 coffee farms within the *Nescafé* supply chain have been 4C certified with the collaborative support of PAEC. Furthermore, by applying sustainable farming practices, coffee farmers reduced by 40% water for irrigation; reduced by 20% their chemical fertilizers/ pesticides; and increased their incomes by 30–100% in proper intercropping models.



The *Nescafé Plan*, in cooperation with WASI, has distributed more than 46 million plantlets of high-yielding and disease-resistant coffee varieties to coffee growers in the five provinces of the Central Highlands: Dak Lak, Dak Nong, Gia Lai, Lam Dong, Kon Tum. This has helped to renew over 34,000 hectares of aged and low-productive coffee areas and it provides strong support to the national government coffee rejuvenation program.

NESCAF

The strategy implemented by the government is to move Vietnam's coffee sector towards greater collaboration between various stakeholders to ensure sustainability and competitiveness through diversified and high-quality products, thus increasing incomes for both farmers and businesses.

Vietnam aims to increase its coffee export turnover to USD 6 billion by 2030 while maintaining its position as the world's second largest coffee producer and exporter. The PPP Task Force has become an important platform to foster synergies and to facilitate and sustain the coffee industry. Vietnam's coffee communities across the public, private and producer sectors must work closer together in order to strengthen the sustainability of the coffee value chain.











YEARS OF LEARNING





After more than two decades working with Nestlé and five years leading the Nescafé Plan, Marcelo Burity, Head of Green Coffee Development at Nestlé, shares insights from the brand's sustainability journey.



"It's important to translate the sustainability strategy into brand and business value or, over time, sustainability becomes just a cost to be managed."

The Nescafé Plan has a very special meaning for The ten-year anniversary of the Nescafé Plan me. When it was launched in 2010, I was working gives us all a chance to pause and reflect on in Nestlé's green coffee procurement team and the road travelled, successes we have had as was particularly involved in the initial development well as challenges that remain, drawing inspiration of our responsibly sourced coffee strategy. and energy for the exciting path ahead. We have Then in 2015 I had the opportunity to take on many reasons to be proud of our achievements my present role coordinating the Nescafé Plan so far, some of which are highlighted in this report. The challenges we have faced have led us to adapt operations across its complete span of activities including Agricultural Services, research and our strategy and shape our way forward. external partnerships.

At that time, I relied on my experience in Mexico, where for a few years I managed both Nestlé coffee procurement and Agricultural Services programs in the country, learning a lot from a great Mexican team. In fact, I am very fortunate to have learned so much from generous Nestlé colleagues across multiple decades, as well as receiving many valuable lessons from our suppliers and partners in this journey.



It is a unique experience to implement such a large-scale global coffee sustainability program. Over the past decade, we have faced difficult choices, witnessed promising programs that did not work in practice, or had to redesign strategies and tactics to keep up with new and unexpected issues, not to mention cope with the external challenges. All of this has made our program more meaningful and helped us to become better professionals.

As we start the next decade of the Nescafé Plan, there are some key learnings to bear in mind so that we can continue to make true progress.

"THE TEN-YEAR ANNIVERSARY OF THE NESCAFÉ PLAN **GIVES US ALL A CHANCE** TO PAUSE AND **REFLECT ON** THE ROAD **TRAVELLED.**





TEN YEARS OF LEARNING



"The closer the business functions work together, the stronger the program becomes and the more value it creates."



Embrace a long-term strategy

There is no such thing as a short-term sustainability activity.

Running field programs, helping farmers to adopt improved practices, working with suppliers so that value chains deliver what is required, effecting lasting, positive change: it all takes many years to get off the ground. Moreover, sustainability is such a vast field that one can easily end up with a kaleidoscope of great actions, instead of a strategically coordinated program. Therefore, it is critical to define a clear, stable and coherent long-term strategy.

Of course, any strategy will need to be adapted and improved along the way, but if the fundamentals of a sustainability strategy are constantly changing, the result is confusion, avoidable costs, loss of time and credibility particularly with farmers.

(2)

Sustainability is a strong driver for consumer preference, and should be at the heart of the business. Sustainability should not be a choice, it must be fully integrated into what the brand is, what it stands for and what it should be remembered by.

All over the world, consumers are more attuned to sustainability than ever before, creating a unique opportunity to connect with them. Although communicating sustainability is not easy, finding an engaging and authentic way to tell its story to consumers is key to positively differentiating the brand from competitors in the market.



Make sustainability a competitive advantage

It's vitally important to translate the sustainability strategy into brand and business value or, over time, sustainability becomes just a cost to be managed. It deserves much more than that.



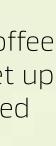
Prioritize and stay focused

A long-term strategy is worthless if not used to make choices.

There is a lot to do for sustainability in most coffee origins, so discipline and rigor are needed to set up a narrow but impactful scope of actions adapted to each local context, all aligned to strategic long-term ambitions. We need to focus on what matters most, where it matters most, to bring about meaningful change.

When it comes to target setting, take time to clearly define and describe the objectives. From the best structured objectives, the right KPIs appear naturally and almost inevitably. As implementation happens, internal functional collaboration is key. The closer Business, Procurement, Agricultural Services, Marketing, Product Development and Public Affairs work together, the stronger the program becomes and the more value it creates.

From there, align your resources accordingly and maintain focus.









Tame the data beast

"Use your rich data to unlock insights."

Disciplined and timely reporting with proper IT solutions are critical to capture, analyze and interpret data reliably and consistently. Good quality data with appropriate tools and capable brains to analyze it can significantly maximize the value of any sustainability program. This becomes most tangible when it comes to impact assessment. The volume of data points collected can be immense, even with strict prioritization of interventions and targeted measurements.

Treat farmers like your customers. Rich insights about them lead to more efficient and better targeted actions. Understanding how farmers react and behave as a result of your program allows you to stop or redesign underperforming activities as well as reinforce successful ones. It allows you to better evaluate partners and programs, ultimately amplifying the return on investment for farmers and partners, and for your business and your consumers.



Given the scale and complexity of the coffee sector, we need partnerships and collaboration to make real impact on the ground.

Partners come in all shapes and sizes. Each one has its expertise, unique capabilities and geographical scope of action, and must complement our in-house capabilities and enrich our knowledge. The key to unlocking value in each partnership lies in the ability to clearly define its role within our long-term strategy and selected priorities. A good fit naturally leads to long-lasting and meaningful relationships, where all parties starting from the farmers – get more than what was planned for.

Deep-seated structural issues such as available **"COLLECTIVE ACTION RELIES** infrastructure, effective agricultural extension services, access to health, education and finance **ON CONSENSUS WHICH IS** prevent farmers in many coffee origins from achieving their full potential. Tackling these HARD AND SLOW TO BUILD. issues require multilateral and systemic efforts with stronger sector-wide collaboration. Farmers, NEVERTHELESS, IT IS SUCH cooperatives, trade/exporters, roasters as well as civil society and governments in both coffee origins A VALUABLE PIECE OF THE and major coffee consuming countries need to cooperate more effectively. Collective action relies SUSTAINABILITY PUZZLE THAT on consensus, which takes time and effort to build. Nevertheless, it is such a valuable piece of the **EVERYONE NEEDS TO JOIN IN."** sustainability puzzle that everyone needs to join in and persevere.



Leverage partnerships and sector-wide collaborations









Be ambitious, take risks and dream big

Our ambitions can seem very daunting. However, we have learned to continuously push the boundaries of what appears possible.

Looking back to 2010, Nescafé set out to distribute 220 million coffee plantlets in ten years. Up to that point, we were not able to distribute more than a few hundreds of thousands of plantlets per year, which was far from the average 22 million per year required. Of course, we had a plan to significantly accelerate, but certainly did not know how precisely to do it. Now, having achieved this target, I can say that our initial plan had to be completely re-thought along the way.

In several countries, we could not accelerate plantlet distribution because farmers had other more profitable crops in mind, or we lacked convincingly superior plant materials. Our plantlet propagation efforts ran into major shortfalls in a few origins, due to issues with partners, underestimated resources, or struggling to choose between centralized and decentralized nurseries. In some origins, authorities and farmers were not initially convinced that renovation was needed. On the other hand, in other countries and with other partners, the program massively over-delivered. Our partnership with the Colombian Coffee

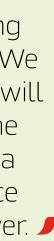
To reach for greatness, have great ambitions and dream big from the start.



Growers Federation (FNC), now also happily celebrating ten years, achieved great results and made a significant positive impact on many coffee-growing communities at a time where they were suffering from the leaf rust outbreak. This initiative is set to continue bringing value to Colombian farmers for many years to come.

The next ten years present no less intimidating challenges: reducing carbon emissions, helping farmers achieve living income, improving social conditions for coffee communities and eliminating packaging waste. We are far from comfortable. We don't have all the answers. We know that there will be failures as well as successes. However, it is the right thing to do and, with all modesty, we have a pretty good track record. This gives us confidence that we and our partners will find a way to deliver.

"To reach for greatness, have great ambitions and dream big from the start."









AHEAD



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TOWARDS A REGENERATIVE AND INCLUSIVE COFFEE SECTOR



PHILIPP NAVRATIL, Senior Vice President, Head of Beverages Strategic Business Unit

It is said that sustainability is a journey. Having looked back at how far we have come in the last ten years, we should allow ourselves to feel confident about the journey ahead and tackling whatever obstacles it may contain. Most importantly, our way forward is clear.

Later this year, we will publish our new Sustainability Roadmap. Working with partners such as the Rainforest Alliance and 4C Services, we will continue to be results-driven as we advance – measuring the impact of our actions and reporting on our progress transparently.

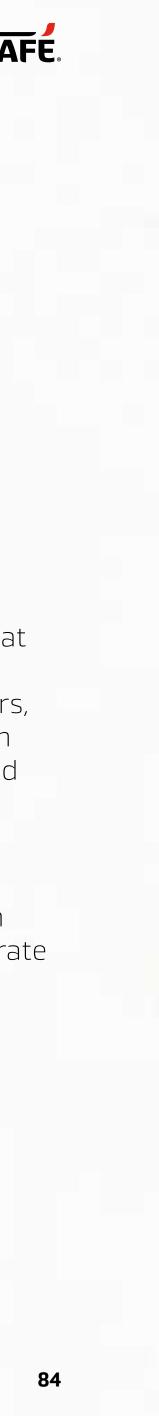
This robust approach has never been more important. We prepared this report in 2020, a year which was marked by the COVID-19 pandemic. The pandemic has had enormous impacts on lives, livelihoods, economies and societies, including in the coffee sector. It has exacerbated some of the systemic and complex challenges that the sector faces, including climate change, farmer profitability, labor shortages and the protection of human rights. To us, it underscored just how important and urgent our work is.

We have an opportunity to build a better future for all in the coffee value chain: A future that is regenerative and more inclusive. As a major buyer of green coffee and one of Nestlé's biggest brands, *Nescafé* has an important role to play in facing and taking on the coffee sector's sustainability challenges and in helping Nestlé achieve its net-zero emissions target by 2050.

For Nescafé this will be part of a broader sustainability ambition that aims to build resilient and regenerative coffee agriculture systems, protect and restore forests, drive sustainable livelihoods for farmers, promote human rights and develop a circular business. NESCAFE

Tackling sustainability challenges like these can seem like a daunting task – but I believe that if all key players, including coffee farmers and their organizations, governments, coffee traders, roasters and consumers, work together, we can achieve our common vision of a sustainable and thriving coffee sector.

To this end, we invite all stakeholders to continue helping us to explore ways to make our efforts more effective. We are always open to dialogue with those who can help us accelerate our ambitions, including our goal of having 100% responsibly sourced coffee by 2025.



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