Rainforest Alliance & Nescafé Plan

Monitoring and Evaluation Highlights, 2018–2022

The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect nature and improve the lives of farmers and forest communities.

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INTRODUCTION

Since 2014, the Rainforest Alliance has provided monitoring and evaluation (M&E) support to guide Nescafé in its field programs with coffee farmers around the world. This executive brief analyses data sets gathered by our teams, and our local and international partners, between 2018 and 2022. During this period, we interviewed thousands of farmers across fourteen origins, collecting data on farm economics, regenerative agriculture practices, and other Nescafé Plan priorities.[1]

Here are some of the key trends[2] we observed:

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1   Carbon footprint data was also collected in 2021 from 12 origins.
2   Please note that samples vary each year. In 2022, not all the farmers participating in the Nescafé Plan were sampled, including farmers in the Antioquia and Risaralda regions of Colombia. Additionally, M&E campaigns were not launched in Honduras until 2019. Data included in this report from Honduras and Colombia starts in 2019 and ends in 2021 for Colombia.

- **Improved yields and incomes:** Since 2018, coffee farmers participating in the Nescafé Plan in China, India, Vietnam, Brazil, Mexico, Côte d'Ivoire, Indonesia, Colombia, and Honduras have experienced improved incomes. This trend is due to a combination of increased yields and higher prices.

- **Gradual adoption of regenerative agriculture practices:** In China, India, Thailand, Vietnam, the Philippines, and Indonesia, there has been a gradual increase in adopting regenerative agriculture practices, such as decreased agrochemical use, intercropping, increased manual weeding, and shade coverage. Trainings and technical support are essential drivers, but other factors—e.g., costs of inputs—likely contribute as well.

- **Increased farmer satisfaction**: Despite COVID-19 disrupting farmer support programs, farmers remain largely satisfied with the Nescafé Plan. High satisfaction rates are driven by technical assistance, large volume purchases of green coffee, and competitive prices.

2018–2022 Rainforest Alliance M&E

7400+ interviews

14 countries

26 languages

ECONOMIC TRENDS: YIELDS, PRICES, AND THE LIVING INCOME GAP

In order to meaningfully assess the economic progress made by farmers participating in Nescafé Plan field programs, we must first measure the "living income gap"—i.e., the difference between what farming households currently earn (through coffee and other income streams) and the living income benchmark for their location and household size.

Figure 1 shows a general profile of the economic conditions of farmers in Nescafé Plan programs in selected priority countries in 2022. First, we assess the approximate household net income, from coffee, other crops, and off-farm sources. Then we compare this to poverty and living income benchmarks. These vary by country, but most define a poverty level around US$2,000 per household per year and a living income level around US$5,000-$8,000 per family per year.

In all surveyed countries, the income distribution is very wide, showing that there is no single household profile for each country applicable to all farmers. Among the seven priority countries,[3] Brazilian and Vietnamese farmers are mostly above living income levels; This is largely due to high yields and farming efficiencies in both countries, with larger monocrop farms in Brazil and small diversified farms in Vietnam. Mexico, Honduras, and Colombia show a roughly even distribution across the three income levels, while Indonesian and

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3   The priority countries within the Nescafé Plan are Brazil, Vietnam, Mexico, Indonesia, Honduras, Côte d'Ivoire, and Colombia. Nescafé's sources 90 percent of its coffee from these countries. Other countries that Nescafé sources from include China, India, Kenya, Rwanda, Thailand, The Philippines, and Uganda.

Percentage of farmers living above and below the poverty line. *Please note, data for Colombia is from 2021; data from all other countries is from 2022.*

- 🔴 below poverty line
- 🟠 between poverty line and living income
- 🟢 above living income
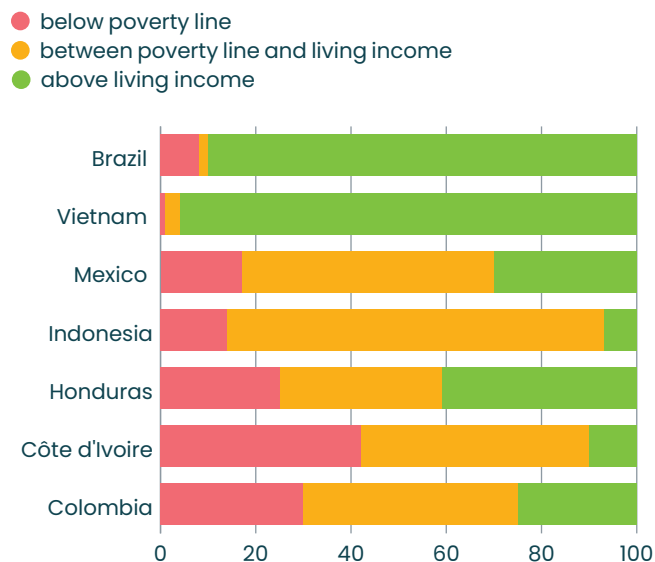
Planting coffee on a farm in Colombia.

Ivoirian farmers mostly earn less than a living income. Across all origins there are farming households with earnings lower than the poverty line. The wide income distribution is due to a variety of factors, including farm size, yield variations, and income diversification activities.

WHAT INFLUENCES COFFEE INCOMES? SPOTLIGHT ON VIETNAM, MEXICO, AND INDONESIA

Between 2018 and 2022, the economic conditions for coffee farmers fluctuated significantly. The international price of coffee reached historic highs in 2021 and 2022, but production costs also rose due to labor shortages and higher input costs. The overall combined result for farmers' coffee-based cash net incomes was generally positive.

For example, in Mexico the relationship between yields, prices, and incomes is largely positive and mutually beneficial. Yields in parts of Mexico, such as Chiapas, have increased significantly since the coffee rust crisis of 2010-2014, thanks in part to renovation activities (where aging or diseased plants are replaced) and new seedlings from Nescafé. Farmers also report higher rates of fertilization in recent years. Combined with the higher prices, average coffee revenue increased significantly for Mexico Nescafé Plan farmers between 2018 and 2022.
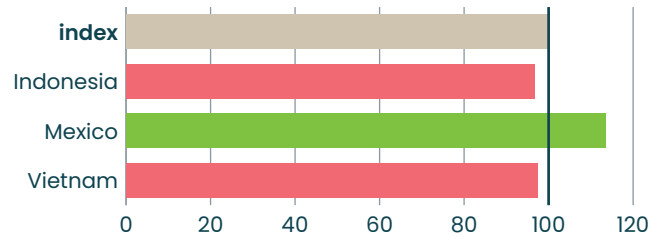
FIGURE 2

In countries like Vietnam and Indonesia, cash incomes increased despite drops in yields. These indicators are monitored annually; indexed analysis allows clearer indication of 2018-2022 evolution.

● 2018 (index point) ● 2022 (improvement) ● 2022 (decline)

Indexed coffee cash income changes, 2018–2022
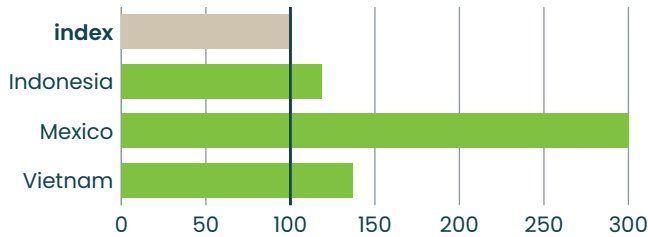
Indexed yield (kg/ha) changes, 2018–2022

In Vietnam, net coffee cash incomes increased despite a decline in yields per hectare and a slight increase in production costs. Here, higher coffee prices spread across large production volumes made a significant difference. Progressive rates of intercropping in Vietnam may contribute to declining coffee yields per hectare (as less area is dedicated to coffee), but they also help farmers maintain a diversified income stream which improves overall economic resilience.

In Indonesia rising production costs—largely driven by labor shortages and dependence on inputs—coupled with extreme weather events, including heavy raining and strong winds during the flowering season, caused yields to decline. While in 2021 higher prices were not enough to overcome economic and environmental challenges, the 2022 data suggests that yields in Indonesia are returning to higher levels which, combined with improved prices, brought positive income developments to Indonesian coffee farmers.

Taken altogether, the data shows that tackling one single driver—such as farming practices or prices—will often not be enough to improve farmers' economic resilience. An integrated approach that combines strategies to improve yields, optimize production costs, and encourages regenerative agriculture practices is necessary.

ENVIRONMENTAL TRENDS: ADOPTING REGENERATIVE AGRICULTURE PRACTICES

Nescafé is committed to promoting regenerative agriculture across its supply chain. Looking at the data, we do see a gradual adoption of regenerative agriculture practices, like intercropping and integrated weed management in many origins.

Another positive development for regenerative agriculture is the decline in use of agrochemicals (herbicides and pesticides) in several countries over the period (fig. 3). While this is partially because of the rising cost of these inputs, we can also partly attribute it to the distribution of leaf rust-resistant

coffee plantlet varieties, as well as agricultural training in safer weed and pest management techniques, such as manual and mechanical weeding.

Other key results include the use of mulching and improving rates for the rejuvenation of old tree stock in India, the Philippines, and Côte d'Ivoire. Areas where future improvement is still needed included use of organic fertilizer, cover cropping, and recordkeeping.

Nescafé has promoted good agricultural practices in the field for several years, which has contributed to the growing adoption of regenerative agriculture practices amongst farmers. But the transition to regenerative agriculture is by no means an easy one and the continuation of these field programs is critical to support farmers in their transition towards more advanced regenerative practices. When asked what additional support they need and how the program can improve, farmers pointed to additional help with inputs like organic fertilizers, guidance for weed management, and assistance with crop diversification.

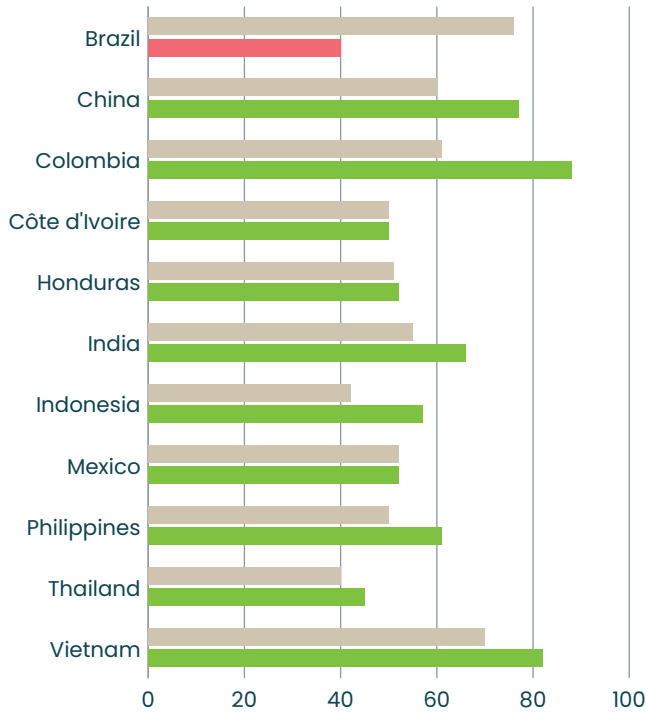*A Vietnamese coffee farmer gathers organic waste to use for compost.*
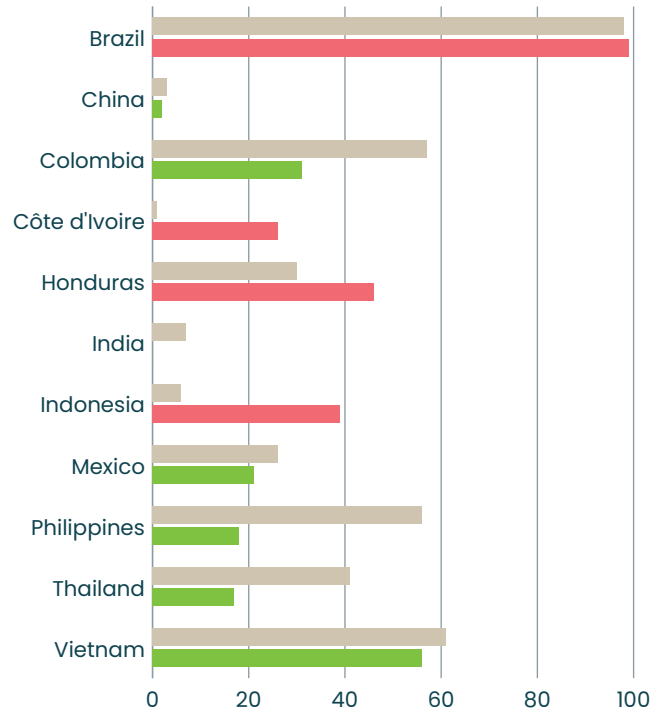
FIGURE 3

Adoption of regenerative practices observed in Nescafé Plan origins.

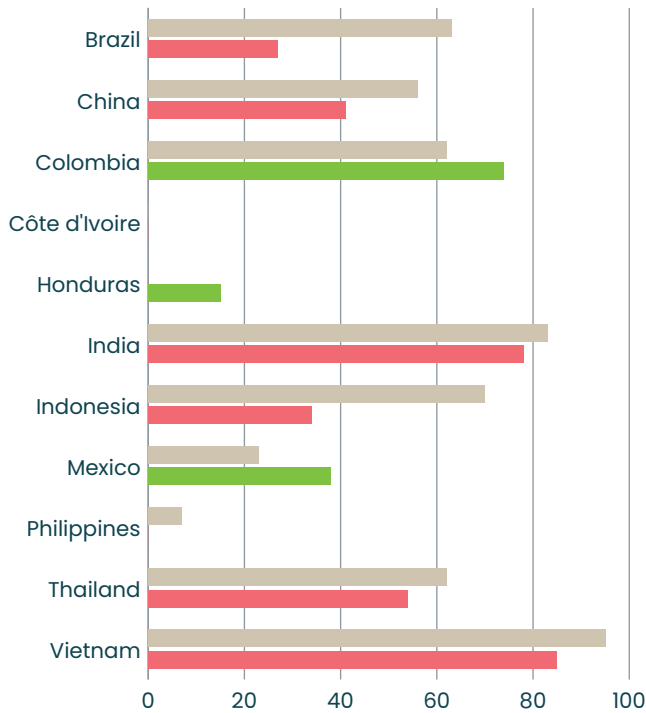● 2018   ● 2022 (improvement)   ● 2022 (decline)

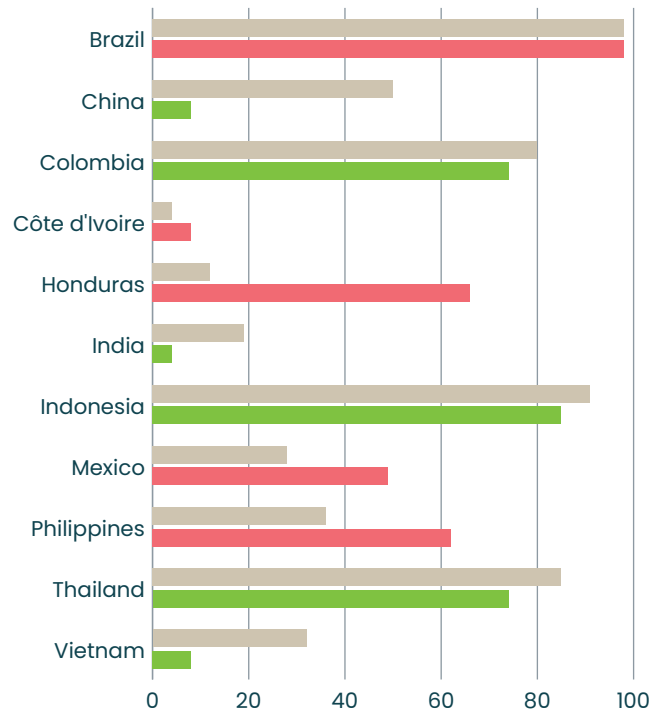
Percent of farmers pursuing integrated weed management.

Percent of farmers applying pesticides (first measured 2019).

Percent of farmers applying organic fertilizer.

Percent of farmers applying herbicides.

A farmer inspects coffee cherries on her farm.

Coffee plantlets at a nursery in Mexico, where farmers are growing new plants more resistant to coffee rust.

FARMER SATISFACTION: IDENTIFYING FARMER NEEDS

In India, Indonesia, Mexico and Honduras, face-to-face training participation rates dropped significantly during the COVID-19 pandemic (fig. 4). During that period, trainings pivoted to digital channels, such as WhatsApp, Line, and WeChat. Unfortunately, many farmers do not have access to smartphones or reliable internet services which limits the reach of digital engagements. As normal conditions resumed in 2022, farmer training engagements have recovered.

Nonetheless, farmers remain largely satisfied with the Nescafé Plan and survey results from 2021 show that an average

of 96 percent of farmers are interested in staying in the program. Farmers cited competitive prices, regular purchasing, high volume purchases, and regular technical assistance in good agricultural practices as motivating factors.

To further maintain farmer satisfaction, survey data can be used to see what types of challenges farmers are facing and the support they need. Farmers indicate the need for more accessible and relevant training content, greater access to technical assistance and, in some cases, improvements to plantlet quality and delivery. In order to improve our training offerings, we can tailor support to the challenges most frequently reported by farmers in 2021 (fig. 5).

FIGURE 4

COVID-19 was incredibly disruptive for farmer training, but several countries are seeing improving participation rates.

● Honduras ● India ● Indonesia ● Mexico
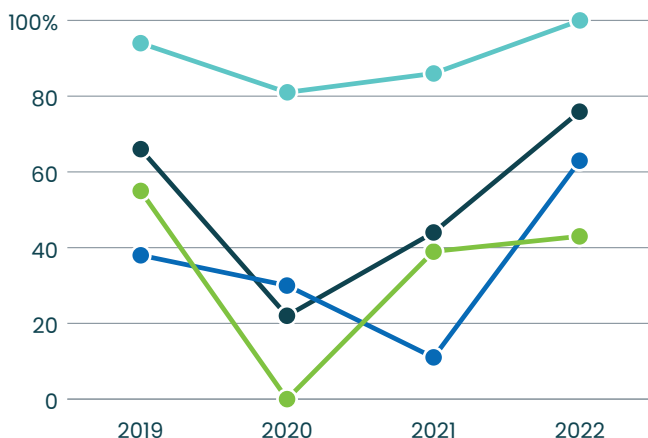
Training attendance

FIGURE 5

In 2021, farmers were asked to identify the top production challenges experienced over the past five years.

Average of top production challenges (multiple selection) in past five years
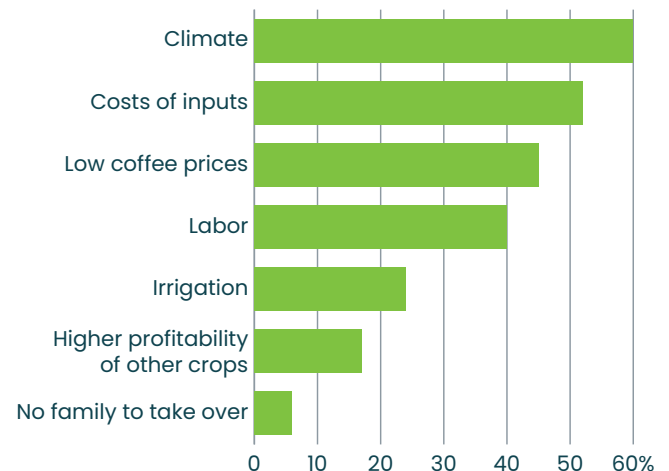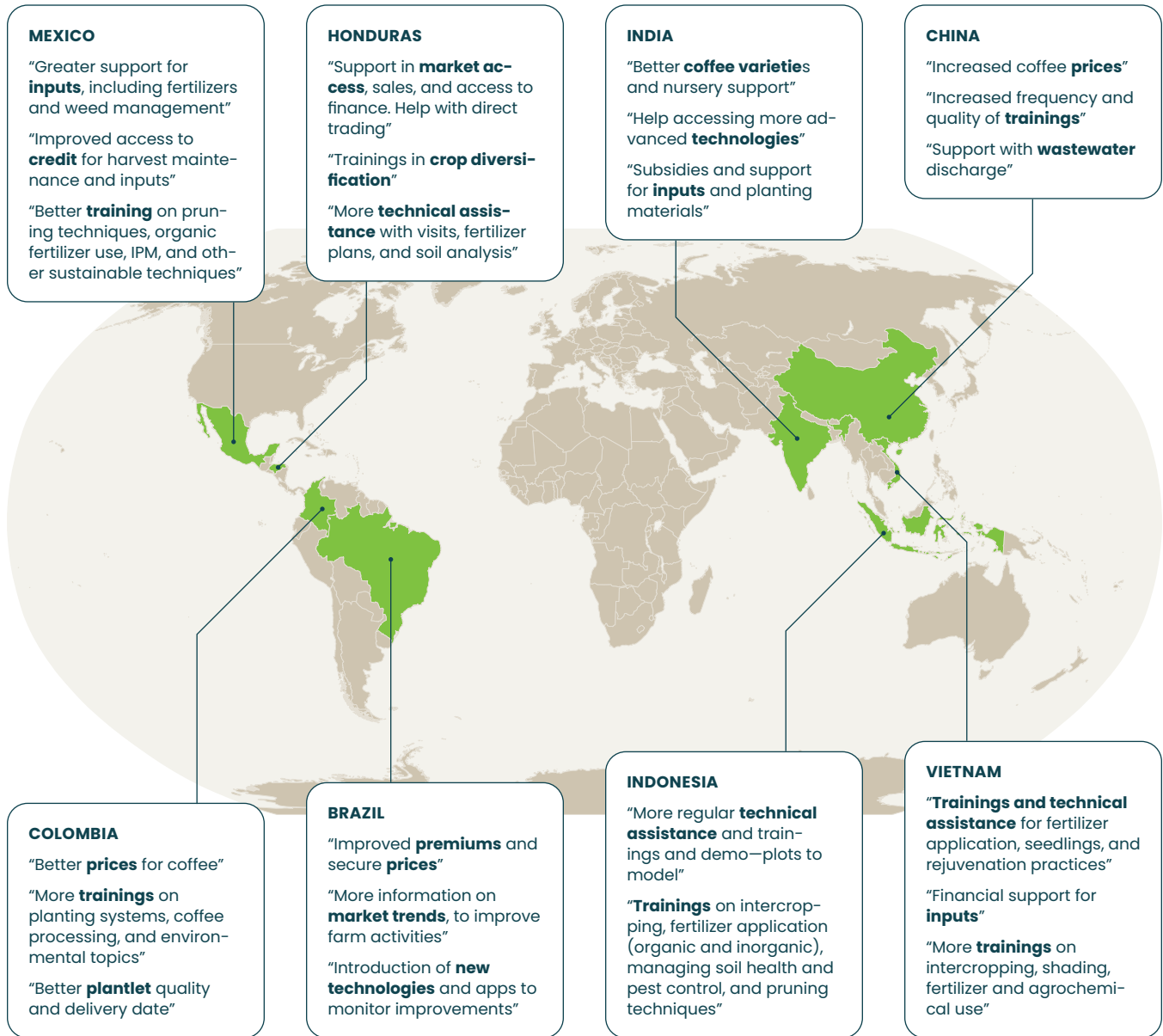
FIGURE 6

The needs and concerns expressed by farmers participating in the Nescafé Plan.

MEXICO

"Greater support for **inputs**, including fertilizers and weed management"

"Improved access to **credit** for harvest maintenance and inputs"

"Better **training** on pruning techniques, organic fertilizer use, IPM, and other sustainable techniques"

HONDURAS

"Support in **market access**, sales, and access to finance. Help with direct trading"

"Trainings in **crop diversification**"

"More **technical assistance** with visits, fertilizer plans, and soil analysis"

INDIA

"Better **coffee varieties** and nursery support"

"Help accessing more advanced **technologies**"

"Subsidies and support for **inputs** and planting materials"

CHINA

"Increased coffee **prices**"

"Increased frequency and quality of **trainings**"

"Support with **wastewater** discharge"

COLOMBIA

"Better **prices** for coffee"

"More **trainings** on planting systems, coffee processing, and environmental topics"

"Better **plantlet** quality and delivery date"

BRAZIL

"Improved **premiums** and secure **prices**"

"More information on **market trends**, to improve farm activities"

"Introduction of **new technologies** and apps to monitor improvements"

INDONESIA

"More regular **technical assistance** and trainings and demo—plots to model"

"**Trainings** on intercropping, fertilizer application (organic and inorganic), managing soil health and pest control, and pruning techniques"

VIETNAM

"**Trainings and technical assistance** for fertilizer application, seedlings, and rejuvenation practices"

"Financial support for **inputs**"

"More **trainings** on intercropping, shading, fertilizer and agrochemical use"

Finally, figure 6 shows a sample of requests submitted by farmers. It demonstrates both the similarities and variety of concerns across the many countries. Requests range from needing additional technical assistance, obtaining ways of accessing markets and credit, receiving better prices, gaining assistance with crop diversification, to accessing new technologies and innovations to help farmers improve their farming models.

CONCLUSION

As reported in the "Ten Years of the Nescafé Plan" report (2021), the Nescafé Plan has surpassed several major milestones. By 2022, it had enabled over 900,000 farmer trainings in Better Farming Practices, distributed more than 270 million plantlets, and contributed to improved farm economics of farmers in several countries.

The Nescafe Plan 2030 is the new chapter of the brand's sustainability journey, adopting an integrated coffee sector strategy where regenerative agriculture is used to simultaneously deliver lower GHG emissions, increased farmer incomes, and better social conditions for farmers and farmworkers. It will address the farmer requests captured by Rainforest Alliance surveys.

Tailored support from the Rainforest Alliance's M&E teams will continue playing a very important role supporting the Nescafé Plan 2030 ambitions. ❀