

Required Report: Required - Public Distribution

Date: May 12, 2023

Report Number: GT2023-0003

Report Name: Coffee Annual

Country: Guatemala

Post: Guatemala City

Report Category: Coffee

Prepared By: Karla Tay

Approved By: Andrew Hochhalter

Report Highlights:

Guatemala's coffee planted area remains steady at 305,000 (hectares) Ha but may shrink slightly in the middle term as other more profitable crops are starting to substitute some coffee areas. High fertilizer costs and lack of labor are negatively impacting MY 2023/2024 harvest, forecast to reduce three percent to 3.43 million 60-Kg bags compared to MY 2021/2022 harvest, and one percent for MY 2022/2023 estimate of 3.48 million 60-Kg bags. Exports in MY 2021/2022 dropped ten percent and are forecast to drop an additional six percent in MY 2023/2024. Production costs increased 60 percent and few farmers can afford specialized labor to identify and harvest only red mature cherries, reducing overall quality.

Crop Area:

Guatemala's coffee planted area for Marketing Year (MY) 2023/2024 remains steady at 305,000 Ha, with bearing trees reaching 1.22 billion. Renovation is not scaling up as expected due to post-pandemic production cost increases limiting farmer ability to invest in improved genetics. Roughly 1.7 million plants per year are renewed through a Starbucks, Counterpart International/USDA, and TECHNOSERVE/USDA projects. There is little domestic public investment in coffee renovation. Huehuetenango, Santa Rosa, San Marcos, and Jalapa continue producing half the country's total coffee harvest.

Harvested area In MY 2023/2024 is forecast to reduce to 250,000 Ha, two percent below the MY 2022/2023 estimate (255,000 Ha), and four percent less than MY 2021/2022 (260,000 Ha). Migration and remittances have contributed to lower labor availability, particularly in the agricultural sector where labor is particularly strenuous, and some planted areas have been abandoned, especially in Huehuetenango and Alta Verapaz. An ongoing trend for diversification of coffee with crops like banana, plantain, and cacao in lowland areas may also reduce coffee production. The National Coffee Association (ANACAFE) is considering the introduction of high-quality Robusta varieties for such areas. In addition, more profitable crops like avocado are starting to displace coffee in the Sololá department around Lake Atitlan. These cash crops often subsidize the coffee crop at the household level.

Production:

Post forecasts that production in MY 2023/2024 will shrink to 3.43 million 60-Kg bags, three percent less than MY2021/2022 production (3.54 million 60-Kg bags) and one percent down from MY2022/2023 estimate (3.48 million 60-Kg bags), which was also negatively impacted by excessive rain during the flowering season, especially in Huehuetenango.

Reduced production was due to a combination of fewer fertilizer applications and lower quality due to the need to harvest all coffee beans at once with available labor, which led to coffee being harvested before reaching maturity. Labor costs increased 52 percent, contributing to production costs increases of almost 60 percent. Efforts to hire labor included coffee cooperatives coordinating transportation, housing, food, and internet for harvesters available in one region to harvest in another, such as the case of a coffee cooperative in Huehuetenango, which was able to hire labor from cardamom areas in Quiche as cardamom was affected by low international prices. Labor for agricultural practices is now costing \$25/day or \$90/100 pound of cherry (Q7.8 for \$1 exchange rate).

In general, fertilizers and agrochemicals experienced interannual increase of up to 57 percent in 2022, following annual increases of 25-53 percent by the end of 2021, being urea the most expensive fertilizer, basically duplicating its price in the years following the pandemic, as reflected in Table 1. As a result, the average cost per pound of coffee in MY 2022/2023 is estimated in \$1.33.

Table 1

Average prices and variations of main fertilizers used in coffee production in Guatemala.
(2020-2022)

| Fertilizer | Average Price by Nov. 2022 (\$/MT) | Variation | Period | | | |
|------------|------------------------------------|------------------|----------------------|---------------------------------|------------------------------|----------------------------|
| | | | Monthly Oct-Nov 2022 | Interannual (Nov 2021-Nov 2022) | Pandemic (Mar 2020-Nov 2022) | Annual 2020-2021 (Jan-Dec) |
| 15-15-15 | 1,131.78 | Relative | 3.74% | 57.27% | 91.13% | 24.94% |
| | | Absolute (\$/TM) | 40.75 | 412.13 | 539.63 | 143.65 |
| 20-20-0 | 1,078.07 | Relative | 0.32% | 49.75% | 91.88% | 29.62% |
| | | Absolute (\$/TM) | 3.41 | 358.16 | 516.23 | 164.49 |
| Urea | 1,197.11 | Relative | -0.04% | 54.87% | 141.62% | 53.40% |
| | | Absolute (\$/TM) | -0.45 | 423.38 | 701.66 | 269.06 |

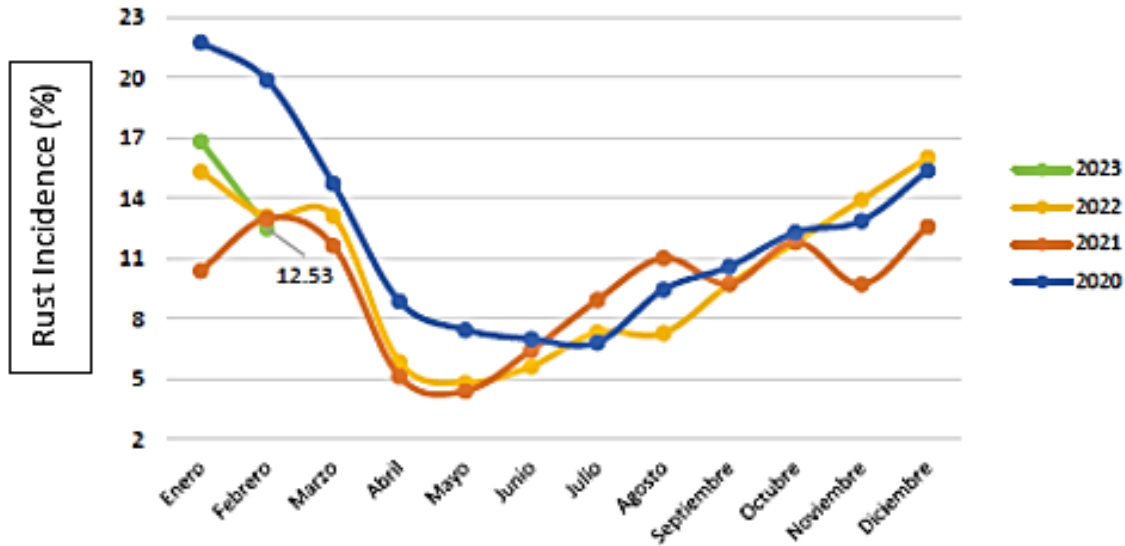
Source: DIPLAN/Ministry of Agriculture (MAGA), Nov. 2022

Farmers are worried about the prohibition for the use of certain pesticides and fungicides. The main pesticide used to combat the coffee berry borer (*Hypothenemus hampei*) has been endosulfan as the active ingredient, very toxic indeed, but very effective. The coffee berry borer pressure increased during MY 2022/2023 due to the fallen fruits that couldn't be harvested because of the lack of labor, which will affect MY 2023/2024 harvest. Triazole fungicides which have been key in rust control are no longer approved for their use in next year's harvest, posing additional challenges in coffee production. Farmers are also worried about the lack of rule enforcement in Guatemala with prohibited molecules, which may affect both certifications and exports.

When the coffee berry borer affects the production, the relation from cherry to parchment reduces drastically from 5 (cherry):1 (parchment) to 7:1, significantly affecting yield. Though natural chemical traps that release alcohol-based coffee odor for cherry borer control are applied at the beginning of the fruiting phase, large infestations cannot be controlled just with traps. Rust can be controlled with parasitoids and other biological controls, but the technologies are expensive and not readily accessible for the small farmers. Though average national rust incidence for the past three years has been relatively low compared to the pandemic year, despite three years of consecutive La Niña phenomenon in Guatemala, as shown in Figure 1, areas with excessive precipitation like Huehuetenango reported significant losses due to rust.

Figure 1

Historical average for rust incidence (%) in coffee plantations in Guatemala



Source: ANACAFE, 2023

Crop insurance for coffee is now available in Guatemala, thanks to the pilot project supported by Nespresso through the Colombian insurance company ASSA. The crop insurance is based on weather historical GPS data for the past 20 years, recognizing 2,500 mm of rainfall as the threshold to produce at least 23 60-Kg bags/Ha. The insurance recognizes three different production stages: flowering, bean filling, and harvesting, activating below or above the precipitation threshold. The insurance to its clients is automatic and doesn't require verification of the damage; many farmer clients were surprised when they received the insurance money without submitting a claim.

Yields:

Coffee yields are variable, depending on many factors, including the farmer's capacity to provide adequate nutrition and labor availability. Adequate nutrition means applying three fertilizations during the production cycle. Some farmers have cut fertilizations down to two applications or one, which normally affects the present harvest and has a much larger impact on the following year, as the next cycle starts with more severe nutrient depletion. This is especially true for the more than 100,000 small farmers producing in less than 2 Ha in Guatemala. Though many farmers are shifting to organic compost, yields continue dropping. Farmers are seeking low-cost technologies that may support pruning, harvesting, and milling.

Varieties are critical in terms of yields and production. The Marsellesa variety, for example, a Sarchimor line, is planted with a density of 3,300 plants/Ha, and under optimal conditions may produce 46 60-Kg bags/Ha and can start producing as of the second year of planting in contrast to other varieties that begin production in year three. But without proper fertilization and inputs, yields may drop down by half. Validation of the World Coffee Research varieties or hybrids has been limited due to the associated evaluations costs, which cannot be financed by the small farmers.

According to ANACAFE, average yield in MY 2021/2022 was 7.7 60-Kg bags/Ha, with a density of plants of 86 percent, with 9 productive branches per axis, 4 productive knots per branch and 7 fruits per knots. The above contrasts with higher reported yields of 46.0 60-Kg bags/Ha, 100 percent density, 40 productive branches per axis, 9 knots per branch, and 25 fruits per knot in farms investing in inputs, labor, and technology. To scale up the technology transfer required to obtain higher yields, given the lack of extension services in coffee, ANACAFE implements the Sustainable Profitable Model, which consists of model farms where farmers can receive training, with the commitment to train others in the community through the establishment of replicas. Through such methodology, ANACAFE has scaled training capabilities for farmers, starting from 62 model productive farms up to 426 productive farms in the past harvest established in total 844 Ha.

Some of the coffee associations and cooperatives under USDA support through Counterpart International have shared the following yields, under certain certification schemes, as shown in Table 2.

Table 2
Guatemalan Average Coffee Yields According to Certification in MY 2022/2023

| Type of Certification | Average Yields (60-Kg bags/Ha) |
|-----------------------|--------------------------------|
| No Certification | 27.1 – 52.6 |
| Organic | 16.9 -23.2 |
| Rainforest Alliance | 13.4 -17.7 |

Source: Counterpart International, 2023

Policy:

On October 30, 2013, Guatemala published Legislative [Decree 12-2013](#) to extend the national coffee trust fund originally established through Legislative [Decree 31-2001](#), published on August 1, 2001. Decree 12-2013 extends the trust fund until October 23, 2026. The trust fund is administered by Banrural Bank and is to be funded by the Government of Guatemala up to \$100 million. The decree assigns the Ministry of Agriculture of Guatemala as the responsible entity to secure the adequate use of the trust fund, which can be used to buy agricultural inputs, mainly fungicides to combat coffee rust, and fertilizers. In addition, credits for farmers are offered with a two percent annual interest rate for small and medium-sized coffee farmers, while big producers get a three percent annual interest rate.

ANACAFE is also pushing for the adequate implementation of labor and environmental policies, among other. On the environmental side, the most important target is to maintain the agroforestry system that coffee under shade represents for Guatemala, while water use, conservation, and reutilization is done in a sustainable manner. These and other important policies in the coffee sector can be further explored in the following link: [Políticas y normativas para el sector café en Guatemala \(anacafe.org\)](http://anacafe.org).

Consumption:

Consumption in MY 2022/2023 is forecast to remain steady at 625,000 60-Kg bags. The in-house increased consumption of coffee after the pandemic had a permanent positive effect in consumption in Guatemala. Consumption of soluble coffee is still higher than roasted ground, though there is a trend to increase roasted ground as coffee shops expand in the urban areas of Guatemala.

Stocks:

Guatemala doesn't manage government held coffee stocks; coffee stocks are managed privately by coffee mills at big farms, associations, or cooperatives. Stocks for MY 2023/2024 are forecast at 13,000 60-Kg bags, 38 percent less than the stocks in MY 2021/2022, but slightly above MY 2022/2023.

Trade:

Guatemala was the 9th largest coffee exporter in the world in MY2021/2022, with coffee making up 25 percent of the agro-industrial exports of Guatemala, and the third most important export product of the country. Total exports in MY 2021/2022 fell 10 percent. Table 3 shows the export matrix for MY 2020/2021 and MY 2022/2022. The United States continues to be the major single country export destination importing almost 1.5 million 60-Kg bags, 16 percent above the previous year. Overall, North America buys 52 percent of the Guatemalan exports, followed by 22 percent imports from Europe, and 22 percent imports from Asia.

Table 3
Guatemalan Coffee Green Bean Exports in MY 2020/2021 and MY 2021/2022

| Exports 60-Kg bags (GBE - Green Bean Equivalent) | | MY 2020/2021 | MY 2021/2022 |
|--|------------|------------------|------------------|
| United States | GBE | 1,452,017 | 1,475,371 |
| Japan | GBE | 322,976 | 355,919 |
| Canada | GBE | 377,977 | 265,523 |
| Belgium | GBE | 321,787 | 261,935 |
| South Korea | GBE | 156,413 | 175,026 |
| Italy | GBE | 131,067 | 141,516 |
| Germany | GBE | 184,148 | 125,778 |
| China | GBE | 261,790 | 98,605 |
| Taiwan | GBE | 54,153 | 52,317 |
| United Kingdom | GBE | 48,841 | 42,728 |
| Others | GBE | 363,707 | 340,642 |
| TOTAL | GBE | 3,674,876 | 3,335,360 |

Source: Post, based on TRADE DATA MONITORING, 2023

Though bean exports continue to be the most important type of Guatemalan exports, roasted and soluble coffee is also exported, mainly to the United States, El Salvador, and the rest of the countries in Central America. Guatemalan coffee exports in MY 2021/2022, which closed at 3.35 million 60-Kg bags mostly consisted of arabic strictly hard bean in 82 percent, followed by semi hard in nine percent, prime (three percent), one percent of robusta and five percent of others. The strictly hard bean exports decreased six percent as a result of the lesser quality harvest impacted by high fertilizer costs and lack of labor.

Exports in MY 2023/2024 are forecast at 3.17 million 60-Kg bags, 2 percent down from exports in MY 2020/2021 (3.22 million 60-Kg bags). Imports in MY 2023/2024 are forecast to slightly raise 3 percent, mostly soluble ones. Soluble imports are mainly sourced from Mexico and Colombia.

Price Table:

Farmers are limited in their export capacities, as few of the coffee associations or cooperatives have an export license, which is still required in Guatemala. Average coffee prices in MY 2022/2023 have been around \$140/100-pound of parchment coffee, with micro lots of special coffee reaching \$160/100-pound of parchment coffee. If organic, Rainforest Alliance, or Fair Trade certified, an additional \$30 /100 pound of parchment coffee is paid for each additional certification. Women hands certification may receive a premium price, though farmers don't have a clear understanding of how it is calculated or when it is recognized.

Table 4
Average price per 100-pound of parchment coffee paid in Guatemala to farmers

| Certification | Average Price per 100-pound of parchment coffee MY2022/2023 |
|------------------------------|--|
| None | \$140 - \$179 |
| Organic | \$141- \$224 |
| Rainforest Alliance | \$192 - \$205 |
| Fair Trade | \$154 - \$202 |
| Organic, Rainforest Alliance | \$205 -\$250 |

Source: Counterpart International, 2023

Though many associated or cooperative linked farmers received prices detailed in Table 4, most small farmers continue selling as cherry, which has been paid in MY2022/2023 at \$16-21/100-pound, significantly cheaper than parchment. Roughly 15 percent of the associated farmers' harvest is sold to middlemen, who offer prices above those that can be offered by the associations or cooperatives. The prices behavior paid for cherry vary in each harvest, sometimes starting with high prices and ending with lower ones, but MY 2022/2023 harvest started with cheap prices and is ending with higher prices.

This reiterates the need to increase the number of coffee organizations, either associations or cooperatives, and the need to depend less on middlemen and more on direct sales. Though direct sales rely on the farmer groups' ability to convert the cherry into parchment, significant investments are still required to make this a reality. Starbucks is supporting the modernization of six mills owned by small farmer groups.

As a rule of thumb, coffee that scores above 82 points according to the Special Coffee Association (SCA) evaluation protocol prompts higher prices paid for the coffee lots. Special quality micro lots, above 90 points, may sell coffee up to \$200/pound. ANACAFE announced that SCA is modifying its protocol after 20 years to permit the inclusion of honey and other special coffee categories. ANACAFE has a broad marketing strategy for the Guatemalan coffees, which includes:

- International Fairs where Guatemala's 8 producing regions participate:
 - United States, Europe, Japan, and South Korea
 - Cup of Excellence through the Alliance for Coffee Excellence (starts with an opening price of \$5.50/pound)
 - One of a Kind (3rd year in a row) – this marketing strategy is addressed to traditional varieties with innovative processes such as natural honey, anaerobic fermentation, and African slow drying beds, as the Cup of Excellence mostly selects special coffees like Pacamara, Geisha, and others; the nano or micro lots for innovation assessment go from 4 to 12 60-Kg bags.
- Regional – include other special coffees and transformation processes.
- National – includes fine robustas, organic, and women hands

ANACAFE selects the Top 10 coffee lots that will be submitted to the international fairs and/or buyers, and coordinates logistics. If the tasting takes place in Guatemala, ANACAFE financially supports the whole process and logistics to bring the tasters to the country. Lots to be evaluated require a lighter roasting, according to the tasting protocol.

ANACAFE also supports the coffee sector through various technological platforms and Apps, [Coffee Tech \(anacafe.org\)](https://anacafe.org), such as:

- Coffee Search – allows buyers to directly contact farmers, [Coffee Search System \(anacafe.org\)](https://anacafe.org)
- Better Soil, Better Coffee, which provides interpretation for soil lab analysis and provides nutrition recommendations: [Aplicación - Mejor suelo, mejor café \(anacafe.org\)](https://anacafe.org)
- Coffee Cloud: Pest and disease monitoring, providing guidance for controls according to the weather (based on Geographical Information System -GIS network validated by the National Institute of Volcanology and Meteorology – INSIVUMEH), [Coffee Cloud: Sistema de alerta temprana para el sector café de Guatemala \(anacafe.org\)](https://anacafe.org)

- Coffee Shops GT: App for searching coffee shops in Guatemala, [Coffee Shops GT \(anacafe.org\)](https://anacafe.org)
- The Coffee Plant: Educational Outreach for farmers via radio, TV, and on-line sources, which surged during the pandemic to continue educating farmers, [El Cafetal Radio \(anacafe.org\)](https://anacafe.org)

Guatemala has a new logo for its coffee, which is represented by the Mayan Jaguar, as shown in Figure 2:

Figure 2

New official logo for Guatemalan Coffees



Source: ANACAFE, 2023

PSD

| Coffee, Green Market Year Begins Guatemala | 2021/2022 | | 2022/2023 | | 2023/2024 | |
|--|---------------|----------|---------------|----------|---------------|----------|
| | Oct 2021 | | Oct 2022 | | Oct 2023 | |
| | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| Area Planted (1000 HA) | 305 | 305 | 305 | 305 | 0 | 305 |
| Area Harvested (1000 HA) | 270 | 260 | 260 | 255 | 0 | 250 |
| Bearing Trees (MILLION TREES) | 1202 | 1202 | 1228 | 1228 | 0 | 1225 |
| Non-Bearing Trees (MILLION TREES) | 150 | 150 | 150 | 125 | 0 | 125 |
| Total Tree Population (MILLION TREES) | 1352 | 1352 | 1378 | 1353 | 0 | 1350 |
| Beginning Stocks (1000 60 KG BAGS) | 111 | 111 | 231 | 21 | 0 | 12 |
| Arabica Production (1000 60 KG BAGS) | 3700 | 3410 | 3600 | 3350 | 0 | 3305 |
| Robusta Production (1000 60 KG BAGS) | 130 | 130 | 130 | 130 | 0 | 130 |
| Other Production (1000 60 KG BAGS) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Production (1000 60 KG BAGS) | 3830 | 3540 | 3730 | 3480 | 0 | 3435 |
| Bean Imports (1000 60 KG BAGS) | 0 | 0 | 0 | 0 | 0 | 0 |
| Roast & Ground Imports (1000 60 KG BAGS) | 4 | 5 | 5 | 5 | 0 | 5 |
| Soluble Imports (1000 60 KG BAGS) | 245 | 344 | 250 | 350 | 0 | 355 |
| Total Imports (1000 60 KG BAGS) | 249 | 349 | 255 | 355 | 0 | 360 |
| Total Supply (1000 60 KG BAGS) | 4190 | 4000 | 4216 | 3856 | 0 | 3807 |
| Bean Exports (1000 60 KG BAGS) | 3400 | 3335 | 3400 | 3200 | 0 | 3150 |
| Rst-Grnd Exp. (1000 60 KG BAGS) | 4 | 4 | 5 | 4 | 0 | 4 |
| Soluble Exports (1000 60 KG BAGS) | 10 | 15 | 10 | 15 | 0 | 15 |
| Total Exports (1000 60 KG BAGS) | 3414 | 3354 | 3415 | 3219 | 0 | 3169 |
| Rst,Ground Dom. Consum (1000 60 KG BAGS) | 300 | 275 | 300 | 275 | 0 | 275 |
| Soluble Dom. Cons. (1000 60 KG BAGS) | 245 | 350 | 300 | 350 | 0 | 350 |
| Domestic Consumption (1000 60 KG BAGS) | 545 | 625 | 600 | 625 | 0 | 625 |
| Ending Stocks (1000 60 KG BAGS) | 231 | 21 | 201 | 12 | 0 | 13 |
| Total Distribution (1000 60 KG BAGS) | 4190 | 4000 | 4216 | 3856 | 0 | 3807 |
| | | | | | | |
| (1000 HA) ,(MILLION TREES) ,(1000 60 KG BAGS) | | | | | | |

Attachments:

No Attachments