Required Report: Required - Public Distribution **Date:** June 06, 2022

Report Number: GT2022-0005

Report Name: Coffee Annual

Country: Guatemala

Post: Guatemala City

Report Category: Coffee

Prepared By: Karla Tay

Approved By: Andrew Hochhalter

Report Highlights:

Guatemala maintains its 305,000 Ha of coffee, but harvested area is slightly reduced due to higher production costs, both inputs and labor. Production costs raised 32 percent as fertilizer prices continue doubling and migration is negatively impacting labor availability. Production in MY 2022/2023 is forecast to fall 17 percent and consumption for MY 2022/2023 is revised up to 624,000 60-Kg bags. The United States continues to be the Guatemala's top coffee export market.

Crop Area:

Guatemala's coffee planted area for Marketing Year (MY) 2022/2023 remains steady at 305,000 hectares (Ha), as it has for the past six years. Bearing trees continue growing and are forecast to reach 1.23 billion. The total number of bearing and non-bearing trees will balance every two-three years, as Guatemala advances with renovation of its coffee plantations. Renewed area has reached approximately five percent of total coffee plantations. After the rust pandemic that hit Central America in MY 2012/2013, it was analyzed that Guatemala's coffee plantations were too old and therefore more susceptible to diseases like coffee rust. Since then, there has been international interest to support coffee renovation in the region. Renovations are led by many different institutions and organizations, such as the Federation of Coffee Cooperatives in Guatemala (FEDECOCAGUA), the National Coffee Association (ANACAFE), TECHNOSERVE, Counterpart International, among others receiving co-funding support by USAID (1,266 Ha renewed through the Coffee Value Chain Program), USDA, and other international donors; in addition, Starbucks supports renovation of 5,000 plants per year since 2019 until 2025, when its 6-year project ends.

ANACAFE is highlighting coffee's sustainability as the route to maintain volumes and quality of the Guatemalan washed Arabica coffee. The 305,000 Ha is considered the country's largest agroforestry system as 98 percent of the area is under shade. This agroforestry system provides services such as oxygen production, carbon capture, and soil and biodiversity conservation. The Guatemalan coffee carbon equivalent footprint is 65 Kg of CO_2e per 100 pounds of parchment coffee, similar to Costa Rica. From the total greenhouse gas emissions produced by coffee, 44 percent result from the use of chemical fertilizers, 20 percent come from oil use (gas and diesel), 16 percent from combustion management, 11 percent from electricity use, and 9 percent from soil corrections.

The Ministry of Agriculture of Guatemala (MAGA) updated the land use map and is still fine-tuning the map for coffee but has established the weight of its different departments as coffee producers, in terms of land area, as shown in Table 1.

Table 1

Coffee producing departments contribution in planted area (%)

Department	Coffee Area (%)
Huehuetenango	15.94
Santa Rosa	15.84
San Marcos	10.45
Jalapa	8.85
Chiquimula	6.71
Guatemala	5.53
Chimaltenango	4.83
Quetzaltenango	4.47
Jutiapa	4.35
Solola	4.33
Zacapa	3.88
Alta Verapaz	3.08
Suchitepequez	3.02
Escuintla	2.66
El Progreso	2.00
Sacatepéquez	1.50
Retlahulehu	1.28
Baja Verapaz	0.67
Quiché	0.43
Izabal	0.16
Totonicapan	0.02

Source: MAGA, 2022, based on land use map (2020)

Post is forecasting a reduction in harvested area for MY 2022/2023 resulting from a combination of higher production costs and lack of hand labor during the whole production cycle. The lack of hand labor is a phenomenon being experimented in Guatemala since several years ago but is becoming more pressing. The lack of hand labor is a combination of migration and remittances. Migration has impacted so much coffee production zones, especially those closer to the Mexican border, that many of the coffee has been left exclusively in the hands of women (Photo 1). Some of the families depending on remittances no longer feel the need to engage in agricultural jobs. Increased production costs will be covered in the next section.

Photo 1

Guatemalan coffee farmers are now mostly women due to men migration to the North

Source: MOCCA, 2022

Production:

Post forecasts that production in MY 2022/2023 will shrink 17 percent to 3.36 million 60-Kg bags, compared to MY 2020/2021. The reduction is a direct result from the global crisis in oil prices and agricultural inputs, which have significantly escalated since November of 2021. Agricultural inputs in Guatemala, up to April 2022, have reported the following increases:

- Complete formula fertilizers (NPK): 100-120 percent
- Soluble fertilizers: 200-300 percent, and some fertilizers like calcium nitrate are not even available
- Herbicides: 100-150 percent, such as glyphosate
- Pesticides: 30 percent

Based on the higher price of inputs, in addition to rising labor costs in Guatemala, Table 2 reflects how inputs and hand labor have negatively impacted coffee production costs in Guatemala. Comparing MY 2020/2021 to MY 2021/2022, total input costs have raised 50 percent, while hand labor augmented 26 percent. Overall, coffee production costs grew 32 percent. Higher price inputs will still put additional pressure in MY 2022/2023, reducing overall production as forecast.

Table 2

Average Green Coffee Production Costs in MY 2020/2021 and MY 2021/2022

Costs ($)/Ha	2020/2021	%	2021/2022	%
HAND LABOR	**$ 1,273.45**	**61%**	**$ 1,719.15**	**56%**
Roads and fences	$ 18.33		$ 24.74	
Replanting	$ 33.79		$ 45.62	
Weed control	$ 82.47		$ 111.34	
Pruning	$ 32.07		$ 43.30	
Fertilization	$ 57.73		$ 77.94	
Fumigation	$ 73.31		$ 98.97	
Shade management	$ 18.33		$ 24.74	
Harvest	$ 758.02		$ 1,023.32	
Wet processing	$ 199.40		$ 269.19	
INPUTS	**$ 510.64**	**24%**	**$ 1,026.00**	**34%**
Replanting	$ 47.42		$ 49.79	
Pesticides	$ 60.48		$ 78.62	
Fertilizers	$ 368.38		$ 828.85	
Others	$ 34.36		$ 68.73	
SUB-TOTAL	**$ 1,784.09**		$ 2,745.15	
Administrative	$ 302.58		$ 302.58	
TOTAL	**$ 2,086.67**	**100%**	**$ 3,047.73**	**100%**

Source: FEDECOCAGUA, 2022

Post estimate for MY 2021/2022 harvest is 3.41 million 60-Kg bag, down two percent from the previous estimate as a result of a drier than expected season. MY 2020/2021 harvest closed at 3.94 million 60-Kg bag, recovering to its bi-annual cycle, which also reflected appropriate weather conditions.

Production for MY 2021/2022 per department shows significant differences resulting from a good rainy season in the Western and North Western part of Guatemala, with 10-15 percent higher production in areas like Huehuetenenago, San Marcos, Coban, and the Verapaces region (Coban and Baja Verapaz), but production in the Southern part of the country lowered up to 10 percent in departments like Santa Rosa and Sacatepequez.

Yields:

Coffee yields in MY 2022/2023 are forecast at 776 Kg/Ha or 13 -60 Kg bags/Ha, 14 percent underneath present coffee yields. Yields are negatively impacted by the jump in fertilizer costs, as farmers take economic decisions to reduce fertilizer application to maintain production costs; this is especially true in Guatemala, where at least 90 percent of the 125,000 coffee farmers are small and produce in less than 2 Ha. In terms of nutrition, farmers are shifting into more natural and organic fertilizer options. Within those options, small farmers are seeking nutritional composition analysis of locally made fertilizers while medium ones are identifying the natural microorganisms found in mountainous soils; big farmers are investing in molecular biology of DNA-fingerprinting to better understand the balance between naturally showing microorganisms and more efficient use of nutrients and chemical interactions in the soil.

Coffee farmers are requesting the support of ANACAFE to invest in research and development, to help farmers navigate challenging times, just as the foreign investment of the World Coffee Research (WCR) in genetics. Improved genetics have resulted in higher yields from 7 to 12 60-Kg bags. In addition, farmers start looking at precision agriculture as a means to reduce total fertilizer demands and increase efficiency. Some of the cooperation projects like USAID's coffee value change with FEDECOCAGUA, and USDA's projects with TECHNOSERVE and Counterpart International are supporting the development of tools to assist small farmers with improved processes from the farm to the patios and mills. To address higher labor costs, farmers are trying low-cost new technologies and taking difficult decisions, such as harvest all-at-once, picking both red and green fruits (Photo 2).

Photo 2

Cherry harvest all-at-once to deal with lack of hand labor in Guatemala

Source: MOCCA/USDA, 2022

To address challenges such as the significant water demand in the wet process mill, some millers are introducing additional low-cost technologies to dry with minimum water volumes, as FEDECOCAGUA has demonstrated. The ecological milling process has reduced the use of water from 1,000 L/100-pound parchment to 220 L. In addition, small farmers are adopting low cost technologies to improve efficiency and reduce hand labor for pruning, planting, and weed elimination, which used to be done manually (see Photo 3).

Photo 3

Low-cost technology-transfer for small farmers for different coffee chores

Source: Coffee Value Chain Project, FEDECOCAGUA/USAID

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.

Consumption:

Consumption in MY 2022/2023 is forecast to slightly grow to 624,000 60-Kg bags, from an estimate of 621,000 60-Kg bags in MY 2021/2022. As Guatemala lifts its COVID-19 mitigation measures, restaurants and coffee shops expect to get back on track with pre-pandemic sales. Consumption of soluble coffee is still 23 percent higher than roasted ground, as Guatemalans usually prefer a quick preparation coffee option for home.

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 2022/2023 are forecast at 11,000 60-Kg bags, the same as estimate for MY 2021/2022. Stocks in MY 2020/2021 closed at higher than normal levels due to the augmented harvest, at 111,000 60-Kg bags.

Trade:

Table 3 shows the export matrix for MY 2019/2020 and MY 2020/2021. The United States continues to be the major single country export destination importing 1.4 million 60-Kg bags, 17 percent higher in MY 2020/2021 compared to the previous year. Canada and Belgium continue in the top three destinations for Guatemalan coffee; China became the fourth importer, followed by Germany and South Korea. Total exports in MY 2020/2021 grew 13 percent. Overall, North America buys 50 percent of the Guatemalan exports, followed by 24 percent imports from Europe, and 24 percent imports from Asia.

Table 3

Guatemalan Coffee Green Bean Exports in MY 2019/2020 and MY 2020/2021

Green Bean Exports (1000 60-Kg Bag)	**MY 2019/2020**	**MY 2020/2021**
United States	1,198	1,452
Canada	354	378
Belgium	233	322
China	96	262
Germany	160	184
South Korea	133	156
Taiwan	55	54
Others	982	867
TOTAL	**3,211**	**3,675**

Source: Post, based on TRADE DATA MONITORING, LLC data, 2022

Though bean exports continue to be the most important type of Guatemalan exports, some roasted coffee is exported to El Salvador, and some soluble exports go to El Salvador and the United States.

Exports in MY 2022/2023 are forecast at 3.02 million 60-Kg bags, 22 percent down from exports in MY 2020/2021. To fill part of this gap, imports in MY 2022/2023 are forecast to slightly raise, mostly soluble ones. Guatemala imports some roasted coffee from Nicaragua, the United States and the United Kingdom. Soluble imports are mainly sourced from Mexico, Brazil, and Colombia.

Guatemalan coffee exports in MY 2020/2021, which closed at 3.68 million 60-Kg bags mostly consisted of arabic strictly hard bean in 87 percent, followed by semi hard in seven percent, prime (two percent), one percent of robusta and three percent of others.

Price Table:

MY 2021/2022 harvest experienced an interesting phenomenon of abruptly maturing all at once. Mills were completely filled without capacity to adequately air the coffee in the drying patios, affecting around five percent of the quality of the total harvest. Prices in the international market raised since July 2021, from starting $3.09/Kg – 3.31/Kg of green coffee, up to $3.97/Kg – 4.41/Kg by the end of the year, and $5.69/Kg in February of 2022, as shown in Table 4. Despite higher prices, greater production costs have not permitted farmers to benefit as much as expected.

Table 4

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

Month	**Average Price per 100-pound of parchment coffee**
July 2021	$140-150
December 2021	$180-200
February 2022	$258

-

Source: FEDECOCAGUA, 2022

Though many farmers have received an average of $193/100-pound of parchment coffee in MY 2021/2022, the majority of small farmers continue selling as cherry, which is paid at $39/100-pound, five times cheaper than parchment. This is a reflection of the lack of cash flow small farmers experience, pressing them to sell immediately after harvest rather than waiting 15 days for fermentation and additional 15 days for payment. Programs like the USDA supported TECHNOSERVE –MOCCA- are providing marketing strategies for farmers to formalize and sign sale contracts to secure the best farm prices. In addition, MOCCA facilitates the certification process with the exporter and mediates so that farmers can get access to microcredits through Genesis Empresarial, MICOOPE, COSAMI, and Plus/Plus in Guatemala. Though Guatemala continues offering the coffee trust fund, this is not readily accessible for the small farmers.

Table 1
Production, Supply, and Distribution

Coffee, Green	2020/2021		2021/2022		2022/2023	
Market Year Begins	Oct 2021		Oct 2021		Oct 2022	
Guatemala	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)	265	265	270	265	0	260
Bearing Trees (MILLION TREES)	1176	1176	1202	1202	0	1228
Non-Bearing Trees (MILLION TREES)	177	177	150	151	0	125
Total Tree Population (MILLION TREES)	1353	1353	1352	1353	0	1353
Beginning Stocks (1000 60 KG BAGS)	120	120	24	111	0	11
Arabica Production (1000 60 KG BAGS)	3700	3810	3870	3280	0	3234
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	3940	4000	3410	0	3364
Bean Imports (1000 60 KG BAGS)	0	4	0	4	0	5
Roast & Ground Imports (1000 60 KG BAGS)	4	7	4	7	0	8
Soluble Imports (1000 60 KG BAGS)	245	349	245	350	0	352
Total Imports (1000 60 KG BAGS)	249	360	249	361	0	365
Total Supply (1000 60 KG BAGS)	4199	4420	4273	3882	0	3740
Bean Exports (1000 60 KG BAGS)	3675	3675	3680	3235	0	3090
Rst-Grnd Exp. (1000 60 KG BAGS)	0	4	4	4	0	4
Soluble Exports (1000 60 KG BAGS)	4	11	5	11	0	11
Total Exports (1000 60 KG BAGS)	3679	3690	3689	3250	0	3105
Rst,Ground Dom. Consum (1000 60 KG BAGS)	271	270	341	271	0	272
Soluble Dom. Cons. (1000 60 KG BAGS)	225	349	220	350	0	352
Domestic Consumption (1000 60 KG BAGS)	496	619	561	621	0	624
Ending Stocks (1000 60 KG BAGS)	24	111	23	11	0	11
Total Distribution (1000 60 KG BAGS)	4199	4420	4273	3882	0	3740
(1000 HA) ,(MILLION TREES) ,(1000 60 KG BAGS)						

Attachments:

No Attachments