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## Report Name: Citrus Annual

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Prepared By: Victor Gonzalez, Agricultural Specialist
Approved By: Evan Mangino

## Report Highlights:

FAS/San José expects a 15 percent decline in Costa Rica's marketing year 2023/24 orange crop driving production down to 250,000 metric tons on suboptimal precipitation - associated with an El Niño weather system - during the critical fruit development period in 2023. Higher international orange juice prices in 2023 bolstered growers' efforts to manage the effects of citrus greening in the face of continued high production costs. The United States remained the primary destination for Costa Rican concentrated orange juice exports in marketing year 2022/23, despite continued growth pushing China's volumetric share of Costa Rican exports above 30 percent.

## ORANGES

## Area Planted

FAS/San José expects area planted to be unchanged in marketing year (MY) 2023/24, as the effects of citrus greening persist and major growers concentrate on improving current area through continued replanting and irrigation investments. Industry sources estimate area planted in MY 2023/24 at 21,000 hectares (ha), including area planted on the Nicaraguan side of the border for processing in Costa Rica. Industry sources estimate the total numbers of orange trees at 7.4 million.

Table 1. Costa Rican Orange Production

|  | $\mathbf{2 0 2 1 / 2 2}$ | $\mathbf{2 0 2 2} / \mathbf{2 3}$ | $\mathbf{2 0 2 3 / 2 4}$ * |
| :--- | :---: | :---: | :---: |
| Area (ha) | 21,000 | 21,000 | 21,000 |
| Production (MT) | 300,000 | 295,000 | 250,000 |
| Yield (MT/ha) | 14.3 | 14.0 | 11.9 |

Source: Costa Rican Ministry of Agriculture and Livestock
*Preliminary estimate
Commercial orange production is concentrated in the northern part of Alajuela province (around Los Chiles, Guatuso, and Upala) and in the northern part of Guanacaste province (near the border with Nicaragua in an area known as Santa Cecilia).

Two companies, TicoFrut and Del Oro, control most of the production and practically all processing of oranges in the country. TicoFrut is the largest company in the sector. TicoFrut's plantations are located in the province of Alajuela (near the border with Nicaragua) as well as across the border in Nicaragua. Oranges from the Nicaraguan plantations are trucked across the border in Los Chiles for processing at TicoFrut's plant located in Muelle, San Carlos, about 50 miles to the south of the border. Del Oro's plantations are in Santa Cecilia, Guanacaste (also near the border with Nicaragua). Smaller, independent growers in other regions of the country - including Acosta (near the Central Valley) and Nandayure in Guanacaste - mostly sell to the local fresh market.

Figure 1. Map of Costa Rican Growing Areas (highlighted in blue)


Source: FIND LINK TO MAP and industry sources.
There are some medium- and small-sized independent producers in the vicinity of the TicoFrut and Del Oro processing plants. Smaller independent producers predominantly sell into the domestic fresh fruit market, diverting oranges to the processing market in response to short-term price fluctuations. Smaller producers have been exiting orange production altogether as citrus greening disease spreads throughout the country, resulting in higher costs of production, lower yields, and lower (or negative) profits.

## Production

FAS/San José forecasts total production to decline 15 percent in MY 2023/24 to 250,000 MT as a result of unfavorable weather conditions in Northern Costa Rica associated with an El Niño weather system. Rainfall during 2023 in the Northern production regions bordering with Nicaragua was much lower than the historical average. Although there was enough precipitation early in the rainy season (around late

May / early June) to induce flowering, lower precipitation over the remainder of the growing season failed to support proper fruit development. Similar conditions affected the plantations on the Nicaraguan side of the border, although irrigation on some Nicaraguan planted area prevented larger production losses. Oranges are harvested mainly from January to May, with peak volume of production in March and April.

Labor scarcity looms as a major concern for all Costa Rican growers ahead of the MY 2023/24 harvest season. Anticipated labor scarcity in MY 2023/24 - associated with sharply higher levels of outward migration from Nicaraguan in 2021 and 2022 - could be partially offset by the 15 percent expected decline in production volume, though industry sources anticipate greater difficulty securing sufficient labor as well as higher wages for scarce pickers in MY 2023/24. Industry sources have confirmed that labor availability was less of a factor than had been anticipated ahead of the smaller-than-expected MY 2022/23 crop. Producers expect higher costs of production in MY 2023/24, though lower fuel and fertilizer costs throughout 2023 have provided some relief. However, the high cost of agrochemicals and the limited availability of molecules to fight citrus greening continue to challenge growers.

Citrus greening disease was first identified in Costa Rica in 2011 and remains a major concern for producers. Citrus greening is now endemic throughout the country's growing areas, increasing costs, decreasing yields, adding uncertainty to future production plans, and limiting growth of production area. The largest farms have been relatively successful in mitigating the effects of the disease by establishing strict controls, including constant farm surveillance and eradication of affected plants. Better capitalized producers use agrochemicals and biological controls (a wasp, tamarixia radiata, that feeds on the Asian citrus psyllid) in their preventive measures.

According to industry sources, small- or medium-size growers whose plantations have been affected by the disease, are very likely to exit orange production over the medium-term given the high cost of controlling the disease. The disease has reportedly caused smaller producers to reduce or abandon area planted to oranges, but FAS/San José has not been able to confirm the extent of this trend. Smaller producers, less capable of investing in agrochemicals and biological controls, have reportedly suffered heavier losses. According to Costa Rican government sources, some producers have been less vigilant in eradicating infected trees, contributing to the spread of the disease.

Within area planted to oranges, farmers have gradually increased the number of trees per hectare by using the "Flying Dragon" pattern, which supports higher tree density, easier farm management, and lower production costs per hectare. This innovation has allowed farmers to significantly increase tree density, moving up from 300-450 trees/ha under traditional planting patterns to 800-900 trees/ha with the Flying Dragon. FAS/San José anticipates major growers to continue directing investments toward replanting existing area with new trees and new patterns, rather than increasing area planted. Industry sources expect the pattern renovation process to continue through the early 2030s, gradually driving yields higher over that time.

## Trade

Calendar Year (CY) imports from Nicaragua reached 65,204 MT through September 2023, slightly higher than the same period in CY 2022. ${ }^{1}$ Costa Rica imported 70,872 MT of fresh oranges from Nicaragua in CY 2022, down 9 percent from CY 2021. Imports from Nicaragua have averaged close to 70,000 MT since CY 2017, reflecting the fruition of cross-border investments by Costa Rica's major processors. Growing conditions are favorable in Nicaragua areas bordering Costa Rican orange production area, and land prices and labor costs are substantially lower on the Nicaraguan side of the border.

Table 2. Costa Rica Orange Imports (MT)

| Country | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ |
| :--- | ---: | ---: | ---: |
| Nicaragua | 69,800 | 77,623 | 70,872 |
| Others | 1,446 | 1,548 | 1,559 |
| Total | 71,246 | 79,171 | 72,431 |

Source: Costa Rican Customs Department
FAS/San José expects total orange juice exports (including both single strength and frozen concentrated orange juice) to decline to $33,000 \mathrm{MT}$ in MY 2023/24, as a result of lower expected production. According to the Costa Rican Trade Promotion Board (PROCOMER), total orange juice exports to all destinations in CY 2022 were 39,335 MT (valued at $\$ 54$ million), up almost 21 percent from 32,540 MT (valued at $\$ 46$ million) in CY 2021. Calendar year trade data through September 2023 show total exports reached 35,352 MT (valued at $\$ 60$ million), down 7 percent in volume but 16 percent higher in value over the same period in CY 2022.

The United States continued to be Costa Rica's leading destination for orange juice exports in CY 2023. Total orange juice exports to the United States through September 2023 were 17,625 MT, 8 percent higher in volume and 34 percent higher in value from the same period in CY 2022. Meanwhile, orange juice exports to China have continued to increase from a negligible volume in 2015 to 12,669 MT over the same CY 2023 January-through-September period.

[^0]Table 3. Annual Costa Rica Orange Juice Exports (CY 2022)

| Country | Volume <br> (MT) | Value <br> (thousand USD) |
| :--- | :---: | :---: |
| United States | 16,366 | 31,583 |
| China | 13,912 | 10,053 |
| Netherlands | 3,131 | 3,656 |
| Israel | 2,578 | 1,803 |
| Panama | 920 | 1,142 |
| Others | 2,428 | 5,774 |
| Total | $\mathbf{3 9 , 3 3 5}$ | $\mathbf{5 4 , 0 1 1}$ |

Source: Costa Rican Customs Department

Table 4. Costa Rica Orange Juice Exports (CY 2013-2023)


Source: Costa Rican Customs Department

Costa Rica exports most of its orange production as frozen concentrated orange juice (FCOJ). The volume of single strength fresh orange juice exports has declined in recent years and now represents less than 10 percent of total export volume. Costa Rican orange juice enters the United States duty free under the Central American-Dominican Republic Free Trade Agreement.

## Attachments:

No Attachments


[^0]:    ${ }^{1}$ As a result of a cyber-attack on Costa Rica's Ministry of Finance in April 2022, trade statistics for calendar year 2022 are still considered preliminary.

