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Report Name: Citrus Semi-Annual

Country: Peru

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Report Category: Citrus

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Report Highlights:

FAS Lima forecasts Peruvian mandarin/tangerine production at 550,000 metric tons (MT), with exports expected to reach 222,000 MT for marketing year (MY) 2022/23 (March 2023 to February 2024). Despite a late start to the harvest season due to unusually warm weather, producers expect a solid crop later in the year. Citrus exports to the United States are expected to fall slightly to 122,000 MT but will likely remain Peru's top market.

Table 1. Production, Supply, and Distribution of Fresh Mandarins/Tangerines, Fresh

Mandarins/Tangerines, Fresh Production	2020/21	2021/22	2022/23
PE Market Year Begins	March 2021	March 2022	March 2023
Area Planted (HECTARES)	23,000	23,000	22,000
Area Harvested (HECTARES)	22,000	23,000	22,000
Bearing Trees (1000 TREES)	8,800	9,200	8,800
Non-Bearing Trees (1000 TREES)	400	0	0
Total No. Of Trees (1000 TREES)	9,200	9,200	8,800
Production (1000 MT)	540	570	550
Imports (1000 MT)	0	0	0
Total Supply (1000 MT)	540	570	550
Exports, Fresh (1000 MT)	215	220	222
Fresh Dom. Consumption (1000 MT)	300	320	298
For Processing (1000 MT)	25	30	30
Total Distribution (1000 MT)	540	570	550
(HECTARES), (1000 TREES), (1000 MT)			

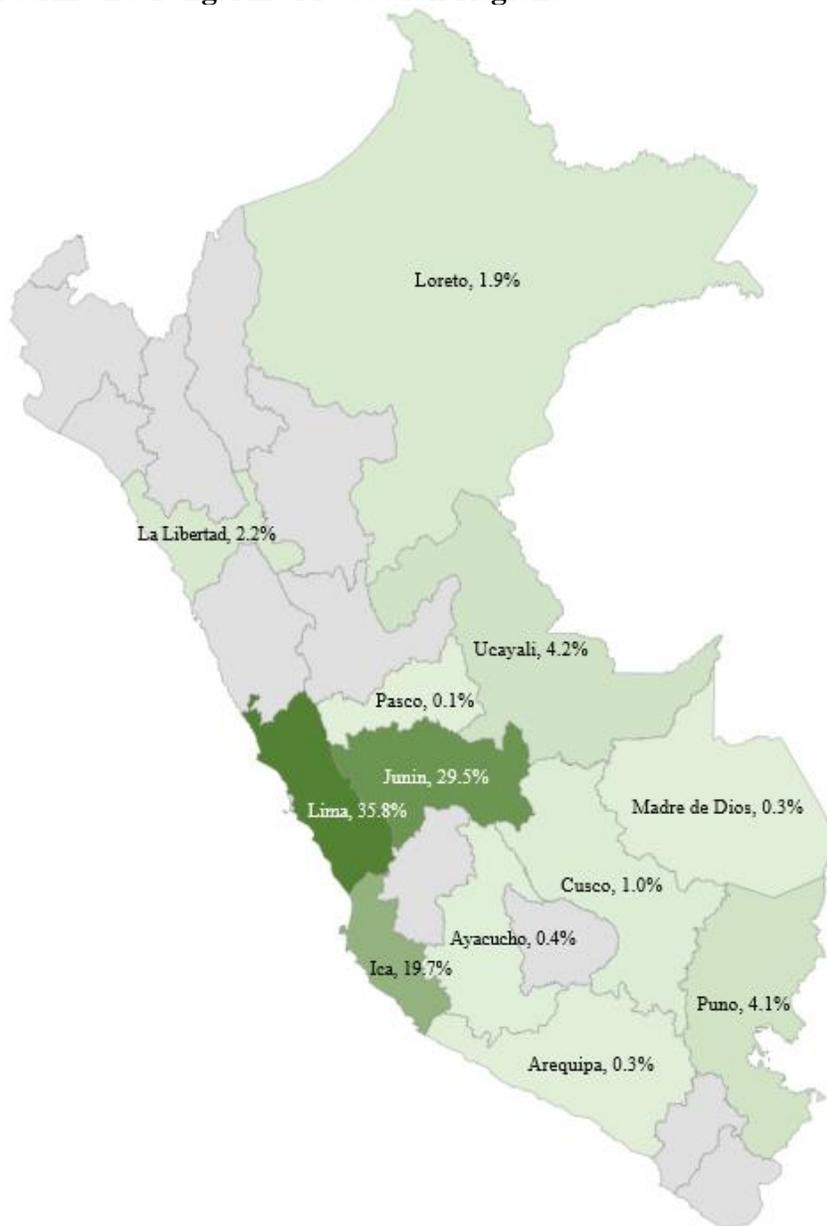
*Note: There is a one-year lag between the Peru MY and the U.S. MY. For example, PE MY 2023/24 is equivalent to U.S. MY 2022/23. To ensure data continuity, the current Peruvian MY 2023/24 will be referred to as U.S. MY 2022/23 throughout this report.

Production

FAS Lima expects Peruvian mandarin/tangerine production to remain as previously forecasted at 550,000 MT in marketing year (MY) 2022/23, slightly lower than the previous year. This decrease can be attributed to removal of low-yield trees, a delayed season, lower harvests of early-season varieties, and a warmer than expected fall season. Peru's mandarin/tangerine planted area is estimated at 22,000 hectares (HA). Despite numerous challenges, Peru's citrus fields continue to show consistent production.

The major mandarin/tangerine production areas in Peru are in the central, semi-tropical coastal regions with good availability of water. The regions of Lima, Junín, and Ica represent 85 percent of national production of mandarins and tangerines in Peru, accounting for 18,600 HA. According to official data, there is also some mandarin/tangerine production in Ucayali, Puno, Loreto, and La Libertad. Tangerine production area is estimated at 4,000 HA while mandarins and other hybrids account for 18,000 HA.

Figure 1. Peru Mandarin and Tangerine Production Regions



Data Source: PROCITRUS – Peruvian Citrus Guild

Production in Peru’s Amazon basin and highland regions is destined for the domestic market while production in the valleys of Lima and Ica is export oriented. Production in Lima and Ica benefits both from the desert conditions (reduced pest pressure, large diurnal temperature variation) as well as close access to the major Port of Callao.

Peru’s mandarin/tangerine production for export is predominantly done on industrial-scale farms of 50 hectares or more. They use state-of-the-art drip irrigation systems that provide the precise amount of water and nutrients to maximize production. Yields on these farms average 70 to 90 MT. Varieties are selected for high productivity and quality. Varieties in Peru include: Satsumas (*Citrus unshiu*): Clausellina, Okitsu, Owari, and Primosole.

Clementines (*Citrus reticulata*): Clementines and Clemenules.

Hybrids: Fortuna, Kara, Pixie, and Nova.

Tangerines from *Citrus reticulata* and *Citrus paradise*: Murcott, Ortanique, and Tango.

Others: Dancy and Nadorcott. Malvaceo and Rio de Oro are also popular varieties with a long history in Peru.

The market for exports is dominated by easy peelers and seedless varieties including Murcott, Tango, Primosole, Clementine, and Orri. Satsumas, Primosoles, and Clementines are considered early-season varieties while Murcott, Tango, and Orri are harvested later in the season. Currently, most Satsumas are being directed towards the domestic market, but Primosoles and Clementines are being exported.

Murcott, Tango, and Orri are typically harvested three to four weeks later and are expected to have a consistent color and size this season.

Figure 2. Tango production sites in the coastal area of Ica, Peru



Source: FAS Lima

After three consecutive years of La Nina's cooler temperatures, it appears the weather pattern may be changing. In March 2023, a rare low-pressure system developed off Peru's coast, unleashing torrents of rain in northern and central Peru, causing flooding and mudslides. This event and above-average ocean temperatures in April and May 2023 have delayed the citrus harvest season.

The National Service of Meteorology and Hydrology of Peru (SENAMHI) has forecasted average rainfall amounts from June to August 2023 (see Figure 3). Rains above normal ranges are expected in the northern and central coasts (in green). The areas shown in white represent average rainfall and below

average rainfall is represented in yellow. According to the forecast, late-variety harvest areas are not expected face rain impacts.

Figure 3. Rainfall forecast June to August 2023



Source: SENAMHI 2023

Mandarins/tangerines are hand harvested to avoid mechanical stress and contamination. The fruit is then transferred to packing plants for size selection, color sorting, and refrigeration. Peru has established several modern packing facilities that ensure a good product.

According to industry sources, mandarin/tangerine production faces production volume challenges to meet export expectations. Approximately 50 percent of Peru’s overall production achieves the size, color, and flavor profile (acidity and sweetness) demanded by international markets.

Consumption

FAS Lima forecasts domestic consumption of fresh mandarins/tangerines in MY 2022/23 at 298,000 MT.

Mandarins are popular in Peru for lunchboxes and between-meal snacks. Peruvian mandarin/tangerine per capita consumption is estimated at 11 kilograms (kg) (24 pounds). Mandarin juices, jams, essential oils, alcoholic beverages, etc. have become popular in supermarkets and convenience stores as an innovative way to boost consumption. A popular local presentation in recent years has been 4-ounce containers of cut mandarins in juice, which has increased in volume of sales from 2,000 MT in 2017 to 14,000 MT in 2022.

Figure 4. Mandarin Display at Local Supermarket



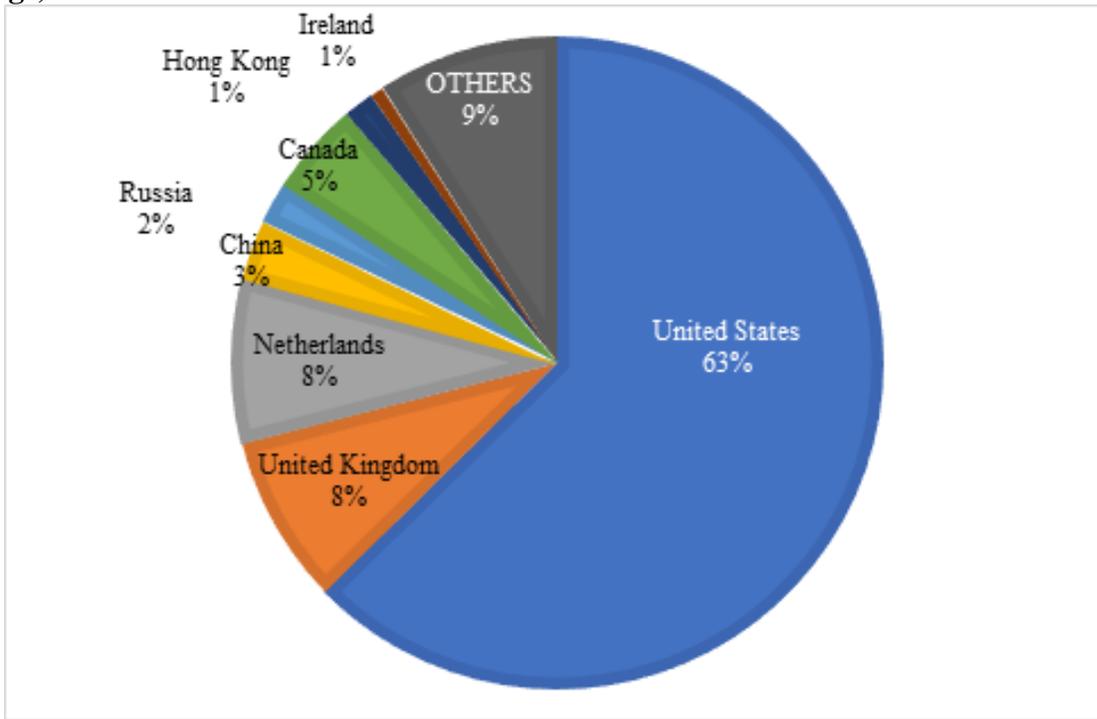
Source: FAS Lima

Trade

FAS Lima expects Peruvian mandarin/tangerine exports to increase by one percent in MY 2022/23, reaching 222,000 MT. In MY 2021/22, Peru exported fresh mandarins/tangerines primarily to the United States (63%), United Kingdom (8%), and Netherlands (8%).

Total fresh exports in MY 2021/22 were up two percent from the previous year, increasing from 215,000 MT to 220,000 MT. In MY 2015/16, Peru exported 112,000 MT, and has shown consistent growth, nearly doubling their exports since then.

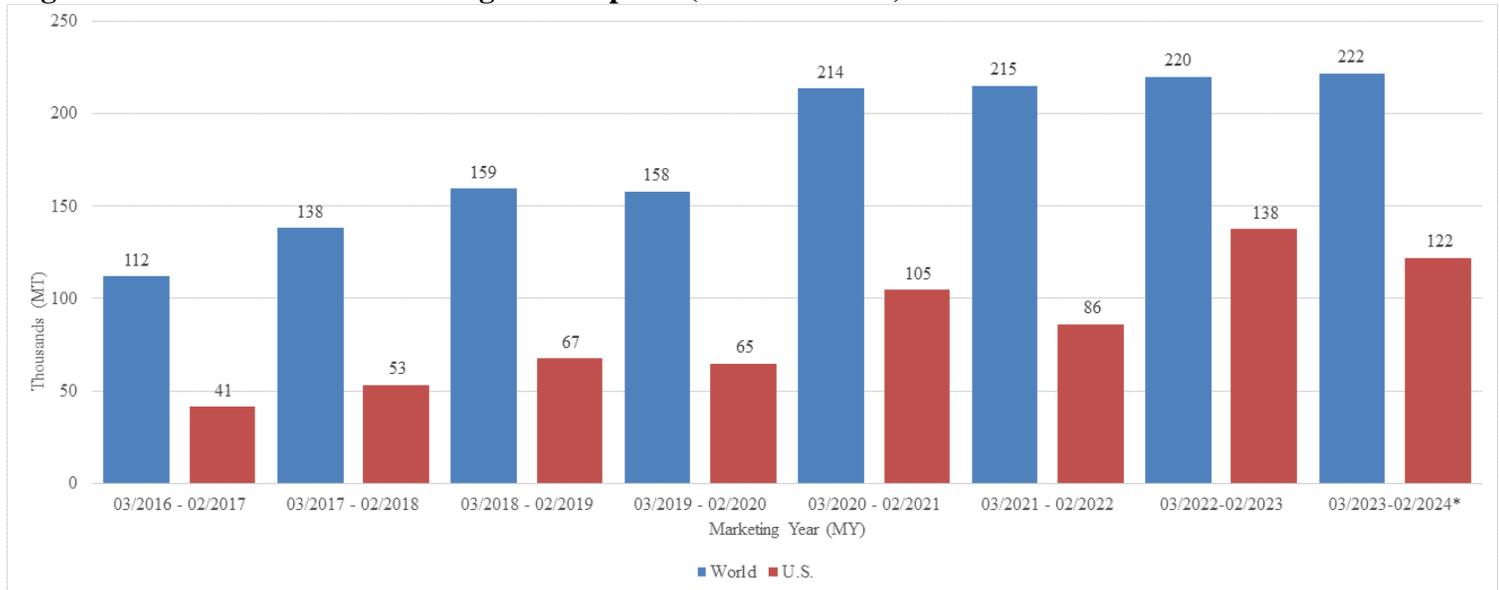
Figure 5: MY 2022/23 Peruvian Mandarins/Tangerines by Destination in Volume (Country, Percentage)



Data Source: Trade Data Monitor

Exports to the United States have grown considerably in the last six years. Over the last three seasons, exports experienced a considerable increase due to the pandemic’s positive effect on citrus demand. However, demand is expected to stabilize this year.

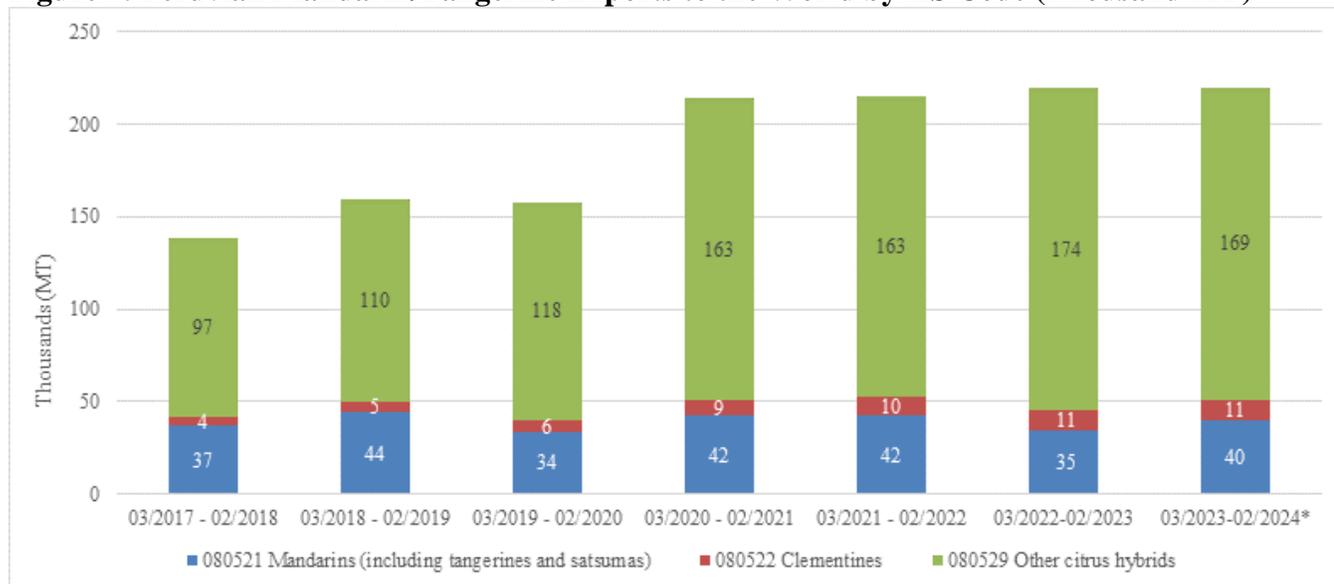
Figure 6: Peruvian Mandarin/Tangerine Exports (Thousand MT)



Data Source: Trade Data Monitor

Total citrus exports to the world are forecast to increase slightly in MY 2022/23 due to higher quality fruit and larger volumes, despite the late harvest. Hybrids typically represent 77 percent of total exports by volume. Clementine exports will likely remain steady, while mandarins are expected to increase.

Figure 7: Peruvian Mandarin/Tangerine Exports to the World by HS Code (Thousand MT)



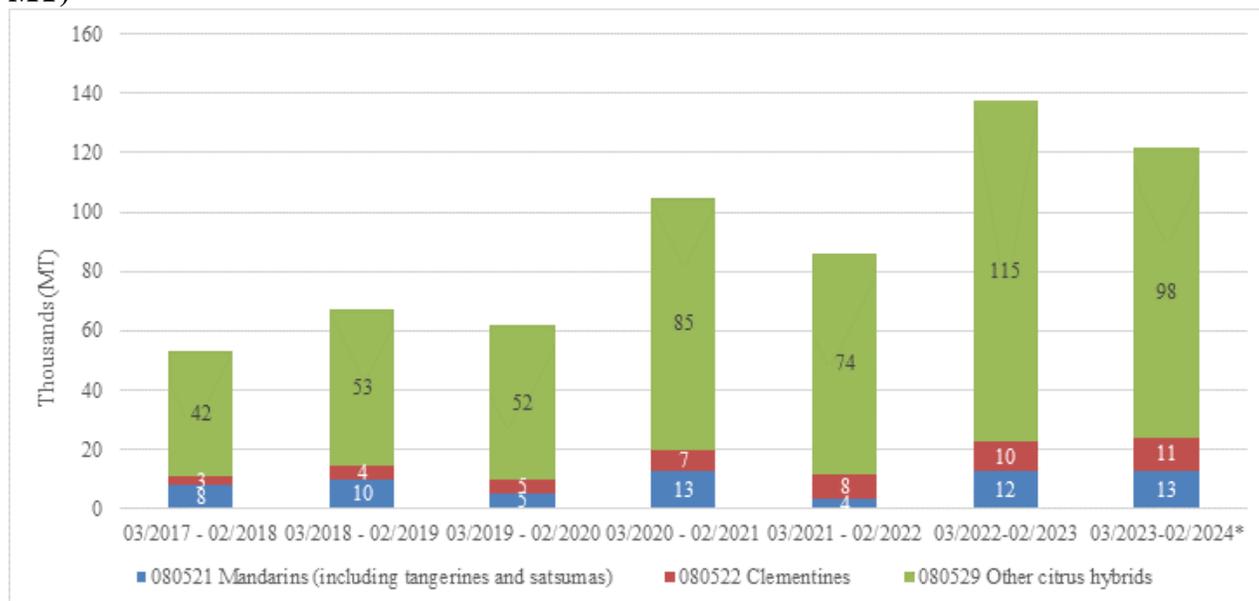
Data Source: Trade Data Monitor

In MY 2021/22, the average price paid for “Other Citrus” hybrids by the United States was \$1,101/MT while the United Kingdom paid \$901/MT and the Netherlands \$880/MT. Average export prices in MY 2021/22 reached \$1,059/MT, compared to \$1,063/MT in MY 2020/21 and \$1,161/MT in MY 2019/20.

Marketing

Fresh mandarins/tangerines are usually packed in cardboard boxes weighing 10 or 15 kg. FAS Lima expects Peruvian mandarin/tangerine exports to the United States to decrease in MY 2022/23, reaching 122,000 MT. Mandarin/tangerine consumption in the United States sharply increased last season from 86,000 MT in MY 2020/21 to 138,000 MT in MY 2021/22.

Figure 8: Peruvian Mandarin/Tangerine Exports to the United States by HS Code (Thousand MT)



Data Source: Trade Data Monitor

Policy

Peruvian mandarin/tangerine exports have benefited from the United States - Peru Free Trade Agreement (PTPA) which entered into force on February 1, 2009. Due to the agreement, Peruvian mandarins/tangerines enter the United States tariff-free.

Peru’s Agricultural Sanitary Agency (SENASA) plays a leading role in the monitoring and control of fresh fruits for export. Every harvest campaign, SENASA updates a list of registered orchards and processing plants. According to official data, SENASA has registered 379 mandarin/tangerine orchards for MY 2022/23. In addition, 30 packing and treatment facilities have been registered, one less than last season.

Production orchards: <https://servicios.senasa.gob.pe/siimf/produccionMandarina.html>

Packing & Treatment plants: <https://servicios.senasa.gob.pe/siimf/empacadoraMandarina.html>

PROCITRUS is the Peruvian citrus trade association, which represents 80 percent of the total citrus export industry. Founded in 1998, PROCITRUS leads industry efforts towards research, development, and public and private coordination.

Mandarin/tangerine standards are governed by a 2014 regulation (NTP 011.023, attached) that promotes quality requirements and uniform criteria for the citrus industry. Appearance and color criteria are required for all citrus products. Juice content is 33 percent for mandarins and 45 percent for tangerines. Minimum diameter size for mandarins is 45 mm and 54 mm for tangerines. Minimum maturity requirements are listed in the following table:

Table 2. Minimum Maturity Requirements for Peruvian Citrus

Crop	Variety	° Brix (minimum)	Acidity				Minimum Ripeness Index
			Min	Max	Min	Max	
			LM	Export	LM	Export	
Mandarins & Hibrids	Satsuma	7.50	0.50	0.75	1.50	1.50	6.50
	Clementine	9.00	0.50	0.75	1.50	1.50	7.50
	Malvasio	9.00	0.50	0.75	1.50	1.50	8.00
	Dancy	8.00	0.50	0.75	1.50	1.50	7.00
	Nova	8.00	0.50	0.75	1.50	1.50	8.00
	Fortuna	10.00	0.50	0.75	1.50	2.00	6.00
	Murcott	10.00	0.50	0.75	1.50	1.50	8.50
	Others (Pixie, W Murcott, Kara, Ortanique)	8.00	0.50	0.75	1.50	1.80	7.00
Tangerines	Minneola, Orlando and others	8.00	0.50	0.75	1.50	1.80	6.00

Source: 2014 Peruvian Technical Standards NTP 011.023 (See attachment)

LM = Local Market

Attachments: [NTP 011.23 2014.pdf](#)