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Global Avocado Growth Far From Over

The Industry Is Becoming More Competitive

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Summary

Global avocado production and trade have expanded at a fast pace over the past decade. Attractive product attributes have driven demand, while profitability has incentivized increased production. In the next few years, avocado trade will continue to grow, making avocados one of the most exported fruits globally. But the market will become more competitive, forcing operators to be not only more efficient but also increasingly sustainable. As availability is expected to be steady, consumers will benefit from relatively affordable prices in key markets, increasing the popularity of this super fruit.

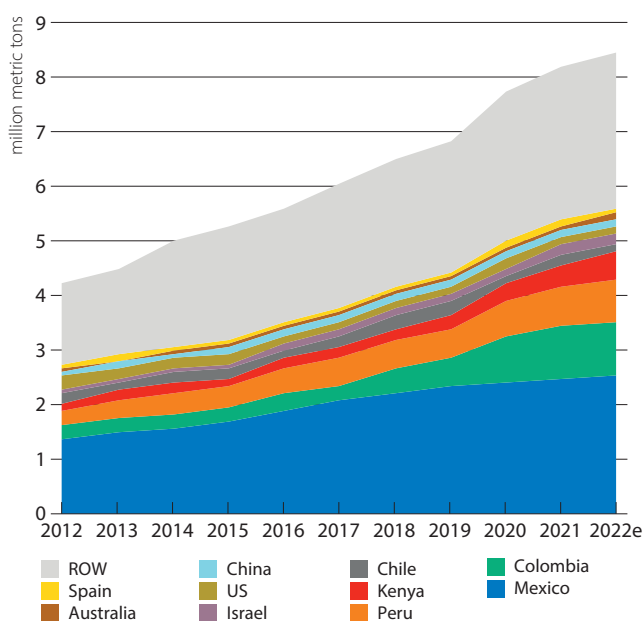
A Nutritious Super Fruit

The health halo of avocados is certainly a major drawing card for consumers around the world. As a nutrient-dense fruit, avocados are an excellent source of vitamins, minerals, and monounsaturated fats. The significant growth in trade comes as no surprise, given that avocados are also an incredibly versatile superfood that is used in many different cuisines. Our recently published [World Avocado Map](#) shows the emergence of global avocado production, consumption, and trade.

Expanding Production and Trade

Global Production Encompasses Several Regions

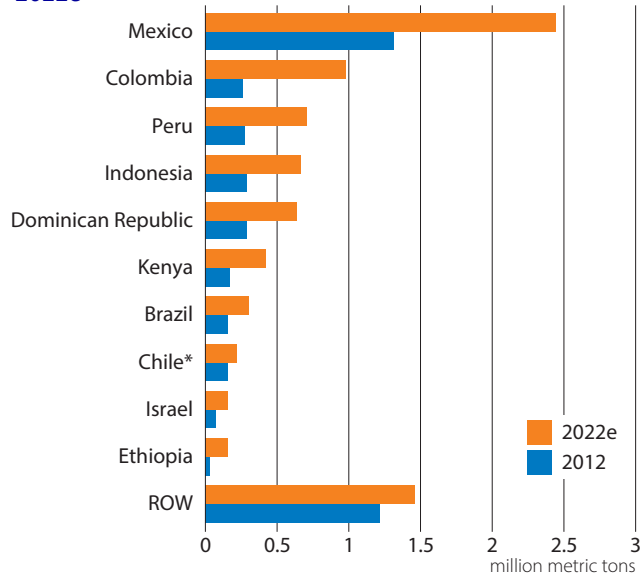
Figure 1: Global avocado production advanced at a rapid pace



Source: FAO, USDA, Rabobank 2023

Global avocado production expanded at a compound annual growth rate (CAGR) of about 7% during the past decade, to just over 8.4m metric tons in 2022. Attractive prices and returns during that period were relevant drivers to expanding production in key regions. In Mexico, which currently accounts for 30% of global avocado output, production grew at a CAGR of roughly 6% during the past decade. In Colombia, Peru, and Kenya, production increased roughly 15%, 12%, and 11% during the same period, accounting for 12%, 9%, and 6% of current global production, respectively (see Figures 1 and 2). The US, still among the world's largest avocado-producing countries in 2012, dropped a few places in the ranking and is no longer a top 10 producer.

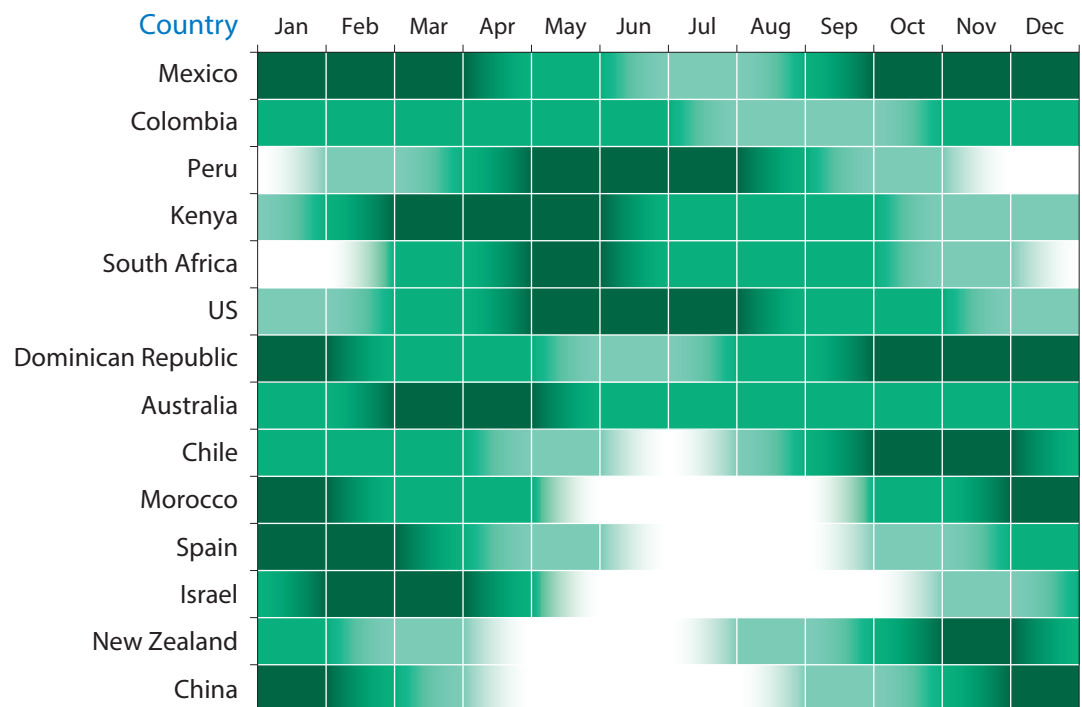
Figure 2: Top 10 avocado-producing countries, 2012 vs. 2022e



Note: Chilean production numbers relate to the season – e.g. 2021 numbers represent the 2021/22 season.
Source: FAO, USDA, Rabobank 2023

Increased avocado production in countries with complementary harvesting seasons has allowed year-round availability in key markets, including the US, the EU, and some markets in Asia. While production in Mexico extends year-round, it reaches a seasonal low in June and July, when production peaks in the US (California) and Peru, providing steady supplies to the US market (see Figure 3). Also, shipments from Peru, Colombia, Chile, Spain, South Africa, Kenya, and other regions keep the EU market well-supplied throughout the year. Seasonality in China will allow increasing imports from regions such as Peru.

Figure 3: Avocado production season for select countries

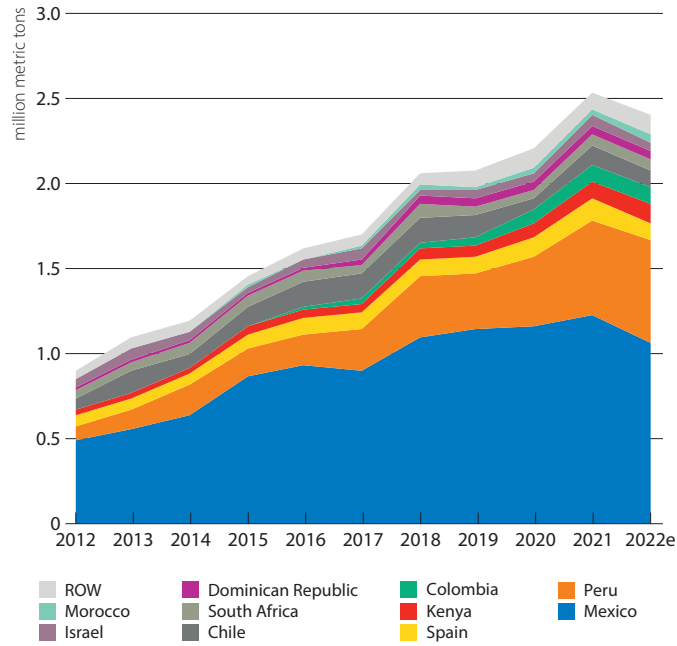


Source: Hass Avocado Board, Rabobank 2023

Diversifying Markets Will Be Key as Global Trade Continues To Grow

Global avocado exports declined 5% in 2022, as increments in shipments from Peru, Kenya, South Africa, and Morocco could not offset lower production and exports from Mexico, Spain, Chile, and Israel (see Figure 4). This lower supply was more noticed in the US market. Meanwhile in Europe, concentrated volumes in the summer months led to low average prices for Peruvian and South African supply, but in the winter months, a relatively small supply led to a recovery in prices. In Asia, imports declined due to high exchange rates in Japan and to lower demand resulting from strict quarantines in China.

Figure 4: Global avocado exports showed strong growth over the past decade

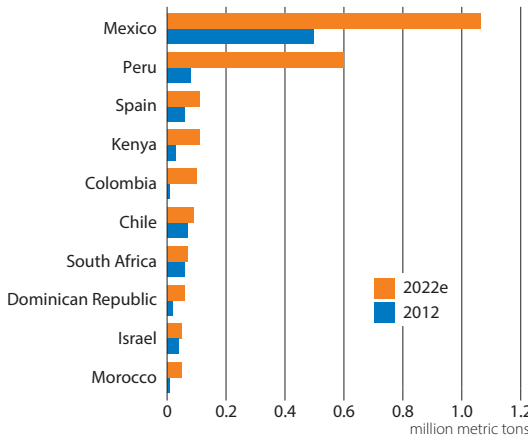


Source: Trade Map, Rabobank 2023

With exports increasing at a CAGR of around 8% over the past decade, Mexico reaffirmed its place as the largest avocado-exporting country in the world, surpassing 1m metric tons in 2022. The primary destination is by far the US market, where product versatility and promotional campaigns have helped to create demand for avocados in retail and foodservice channels. Exports from Peru, Spain, and Kenya expanded at a CAGR of 22%, 6%, and 15%, respectively, between 2012 and 2022. In addition, exports from Colombia rose from the ground to 99,000 metric tons in the same period, while exports from Chile, South Africa, and Israel grew marginally (see Figure 5).

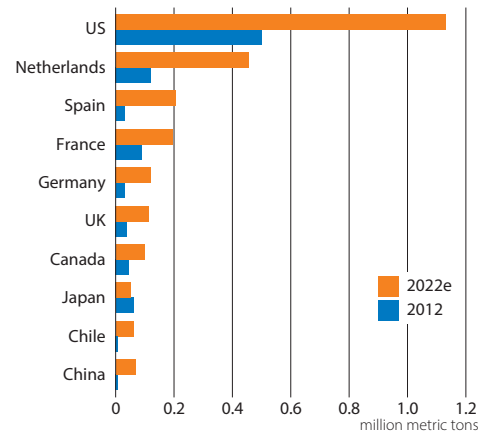
On the import front, the US remains the largest destination market, with imports increasing at a CAGR of roughly 8% from 2012 to 2022. Imports to the Netherlands, Spain, France, Germany, and the UK expanded at a CAGR of around 14%, 20%, 8%, 16%, and 12%, respectively. Among the top 10 avocado-importing countries, imports to Chile grew the most, from 1,000 metric tons in 2012 to 59,000 metric tons in 2022 (see Figure 6). Chilean domestic production has shown a flat trend, with on-years and off-years due to alternate bearing and weather effects. Meanwhile, demand has grown steadily as the popularity of avocados has reached record highs, leading to imports (mainly from Peru) to fulfill growing demand in the months without domestic supply.

Figure 5: Top 10 avocado-exporting countries, 2012 vs. 2022e



Source: Trade Map, Rabobank 2023

Figure 6: Top 10 avocado-importing countries, 2012 vs. 2022e



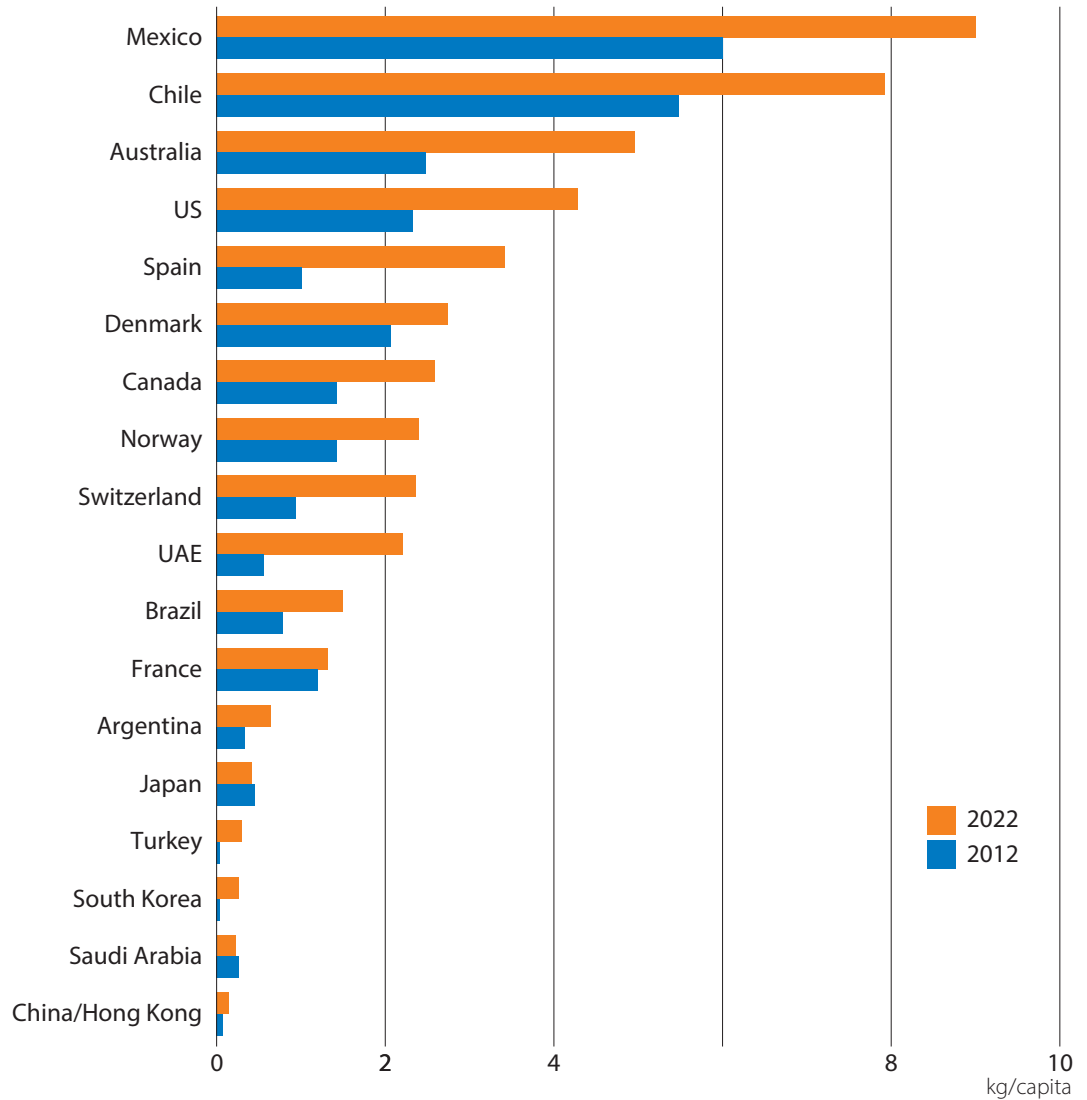
Source: Trade Map, Rabobank 2023

Increasing Global Availability

We estimate the global commercial market value of fresh avocados was around USD 18bn in 2022. With a share of about 32% of the global market value, Latin America is still the largest market, followed by the US and Canada, which together account for roughly 27%. According to our estimates, Europe, Asia, Oceania, and Africa and the Middle East account for 22%, 11%, 4%, and 4% of global market value, respectively.

Using a combination of domestic production, trade balance, and population size, we estimated avocado per capita availability for individual countries. Mexico leads in this category, with a global record of about 9kg of fresh avocados per person per year, followed by Chile with almost 8kg. Australia and the US complete the list of countries with over 4kg per capita. Avocado availability has increased in most markets (see *Figure 7*), and we estimate there is room for significant growth in several markets.

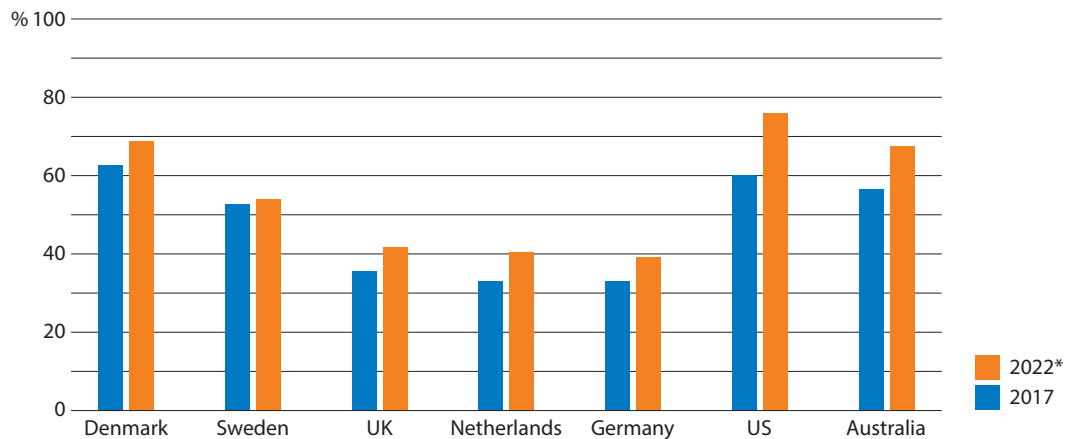
Figure 7: Per capita availability of avocados, 2012 vs. 2022



Source: FAO, Rabobank 2023

Another dimension of interest is household penetration of avocado retail purchases. While this metric has increased in the past five years in select markets, it is particularly high in countries such as the US, Denmark, Australia, and Sweden (see *Figure 8*). Increasing purchase frequency and purchased quantities will continue to provide opportunities to grow consumption, even in markets with elevated household penetration.

Figure 3: Household penetration of avocado retail purchases in select countries, 2017 vs. 2022*



Note: 2022 or the latest year available. Household penetration is the share of households buying avocados at least once that year

Source: GFK, Kantar, Hort Innovation, Hass Avocado Board, Rabobank 2023

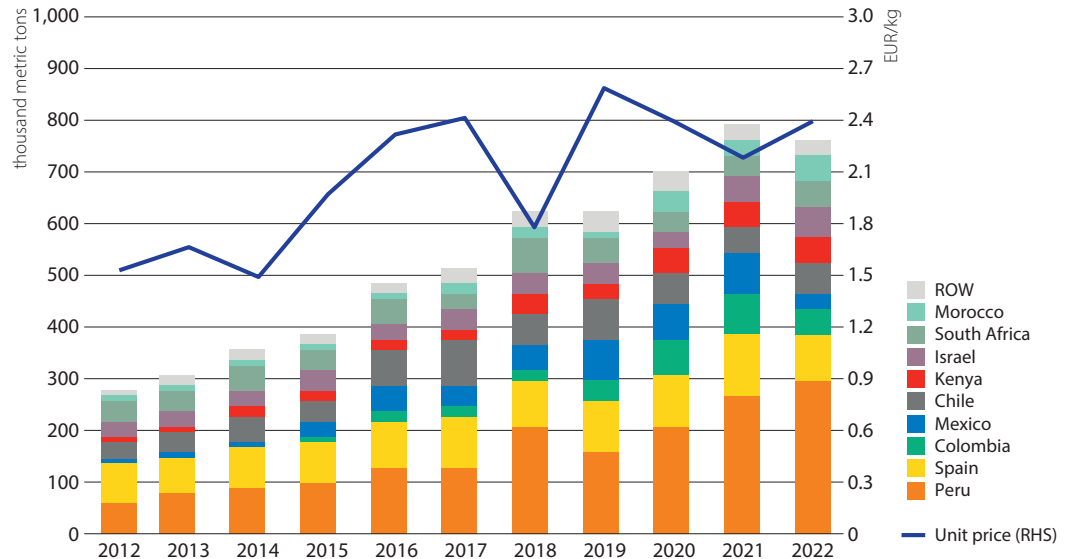
Regional Outlook

EU: Market Growth Will Pick Up Again but Will Require More Effort

We do not expect a trend break in the EU avocado market anytime soon, despite the remarkable drop in last year's market volume. In 2022, EU avocado supply declined by 4%, after a decade of firm growth (see Figure 9). The reduced supply in the EU market in both 2022 and early 2023 was mainly the result of issues in production and logistics. For the remainder of 2023 and the years ahead, we expect that market growth will pick up again for multiple reasons. The main reason is that supplying countries, including Peru, Kenya, Colombia, and Morocco, have continued to expand production, and the EU remains one of their key markets. Furthermore, they have received a little help from improving logistics and easing reefer container rates, which are now coming down from their 2022 peaks. Last, but not least, European consumers have not lost their appetite for avocados despite the increased pressure on their budgets in 2022 and 2023.

But the age of double-digit growth is likely behind us. The pace of market growth in the coming years will diminish from the 13% average annual growth rate of the previous decade (2012-2022) toward single-digit growth rates. The increase in avocado import prices in the EU market has already slowed down in recent years, showing that the market is maturing. But it is still possible for the EU to absorb the rising imports expected from an increasingly diverse range of countries in the coming years. Consumption of avocados is in its infancy in some EU countries (including large countries like Italy and Poland), and promotional activities have been on the back burner compared to the US. Up to now, the increased interest in the culinary and nutritional aspects of avocados in (social) media was sufficient to keep avocado sales rolling. From now on, to keep sales going, more consistent quality and promotional efforts will be needed, with the latter likely to be associated with lower market prices during peak supply months.

Figure 9: EU avocado supply* and average unit import prices, 2012-2022



Note: Supply = production + imports

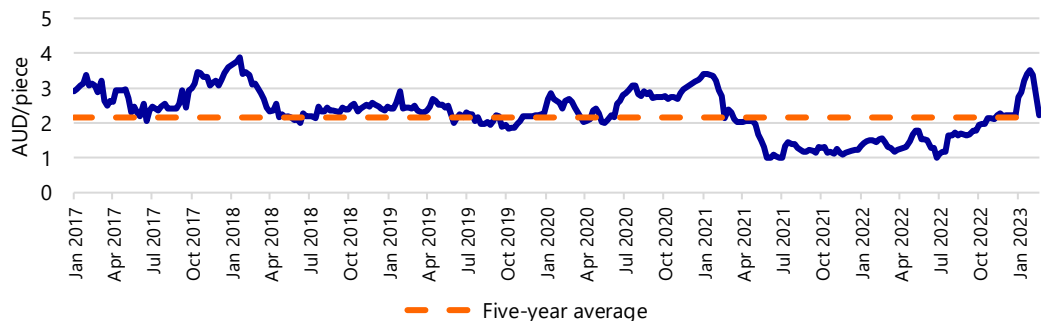
Source: Eurostat, Rabobank 2023

Australia: Avocado Avalanche Incoming

The Australian avocado industry is experiencing a period of volatility as it learns to cope with the growing pains of increased supply in the market. In 2022 local oversupply meant domestic retail prices averaged AUD 1.61 a piece, 32% below the five-year average (see Figure 10). On the other hand, there was a 35% increase in export volumes, to over 11,000 metric tons. This was evident in key export regions, where Australia increased market share in Singapore (73%), Hong Kong (25%), and Malaysia (62%). The weaker Australian dollar also supported Australia's competitiveness against its peers, with prices rising 6% to a FOB export price of AUD 5.02/kg.

Retail prices started out strong in 2023, with production from Western Australia lower due to alternate bearing. However, they have since come down, coinciding with the beginning of the Shepard avocado season. As the Hass season begins again in May, we expect increases in supply to further weigh on domestic prices. With plenty of production growth expected in the next few years, maintaining market share in key countries and developing new market access will be priorities to ensure sustainable returns for growers.

Figure 10: Australian avocado retail prices, Jan 2017-Jan 2023



Source: Australian Avocados, Rabobank 2023

Opportunity in India

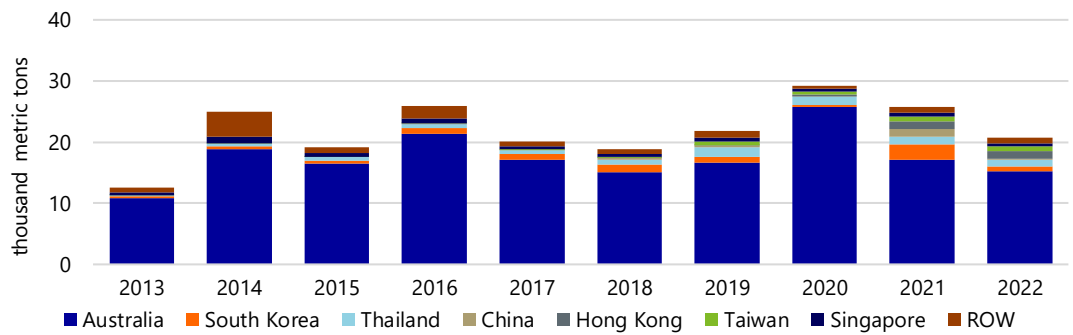
In March 2023, the prime ministers of Australia and India announced new access would be granted for the export of Australian Hass avocados to India, pending a provisional access period. This will also coincide with Australia having a tariff rate advantage over other key suppliers to the

region (New Zealand, the Netherlands, Peru). India's avocado imports have been growing rapidly over the past five years, albeit from a very low base. With a growing middle class, India provides a substantial opportunity for Australia to diversify its avocado exports.

New Zealand: Growing Market Diversification

In 2022, export volumes from New Zealand dropped 20% (see Figure 11), due to a combination of sufficient supply in Australia, decreased demand from destinations in Asia, and lower supplies of export-quality fruit. Despite the growth in market diversification in recent years, 2022 brought volatility to the global economy, which weighed on demand for avocados. Weakening currencies in Asia, higher avocado prices, and increased reefer container rates were not supportive for demand. We expect these headwinds to continue in 2023. Production was affected by La Niña, with significant wet weather events causing waterlogged soil, poor pollination, and a higher-than-normal reject rate in 2022. We expect the 2023 season to bring lower production, followed by a bumper crop in 2024. With plenty of production growth expected in the next few years, rebuilding market share in Asia will be a priority for securing demand.

Figure 11: New Zealand avocado exports, 2013-2022



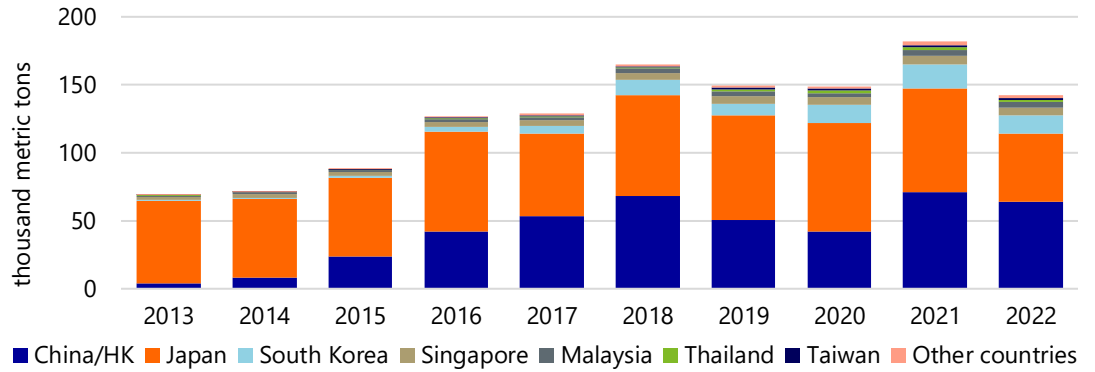
Source: Trade Map, Rabobank 2023

Asia: Strong Decline in Imports in 2022

Avocado imports to the top eight importing countries in Asia dipped 22% in 2022 (see Figure 12), as high freight costs weighed on the price and timely transport of avocados to market, exchange rates weakened, and household budgets were squeezed by rising inflation. Most significantly, Japan, the largest importer in Asia until 2021, saw a 34% YOY reduction in avocado imports. The weak Japanese yen and rising import costs contributed to the decrease. Although some normalcy returned to reefer container rates, the yen remained weak in the first quarter of 2023. We expect the yen to appreciate slightly on a 12-month view, and with the food market improving slowly but surely, there is still plenty of growth opportunity for avocado imports to Asia.

Volumes to China declined 10% in 2022, as months of quarantine in Shanghai (the main market for avocados in China) led to lower consumption and imports. Despite this, China became the main destination for avocados in Asia last year due to the strong decline in imports to Japan. It is expected that the recovery in the Chinese market following the easing of zero-Covid restrictions and consequent 'revenge consumption' in the first months after that could lead to higher avocado imports in 2023.

Figure 12: Asian avocado imports, 2013-2022



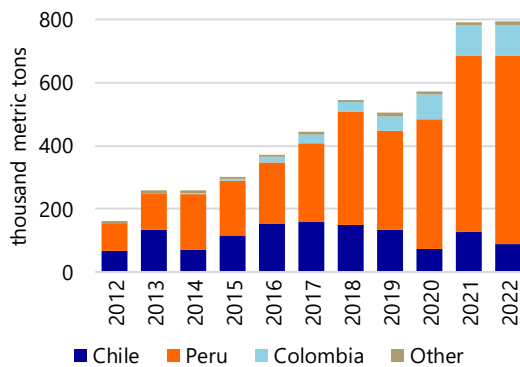
Source: Trade Map, Rabobank 2023

South America: Growth Strengthens Region’s Role as a Major Exporter

South America has strengthened its position as a major avocado export region and now represents one-third of global exports, totaling 795,000 metric tons in 2022 (see Figure 13). Peru, the leading exporter in the region, had a good 2022 season in terms of volume (up 7% compared to 2021) but not in terms of value (-21%) due to the concentration of supply from June to August. Colombia increased exports by 2%, which was enough to retain its position as the second-largest exporter of South American avocados. Meanwhile, exports from Chile declined 30% in the 2022/23 season.

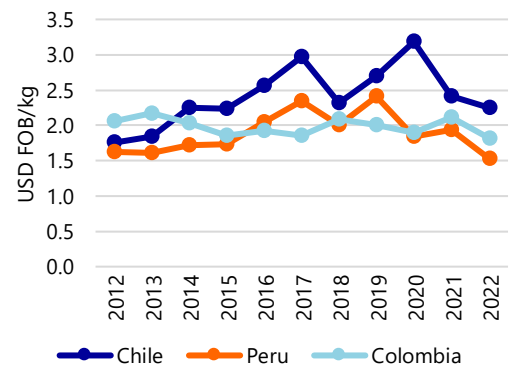
In the prior season, export values were down, especially for Peru, whose export value reached its lowest level in 12 years. Similarly, Colombia recorded a 14% decline, reaching its lowest export value in history. In contrast, Chile remained a supplier of high-quality avocados for a certain window (October to December) in the European market, and values only declined 7% (see Figure 14).

Figure 13: South American avocado exports, 2012-2022



Source: Odepa, Minagri, Colombian customs, Trade Map, Rabobank 2023

Figure 14: South American avocado unit export value, 2012-2022



Source: Odepa, Minagri, Colombian customs, Trade Map, Rabobank 2023

Chile

The Chilean 2022/23 avocado season is already over, with production down 30%. Therefore, a bumper crop is expected for 2023/24, albeit to the level of previous seasons, with volumes projected at around 220,000 metric tons. Due to the 2022/23 season’s lower production and high demand in the Chilean market, prices for domestic avocados have climbed again to record levels previously reached only in 2021, when production declined 40%. Therefore, imports from Peru are expected to

reach a new record, while imports from Colombia are expected to test the market after gaining access in September 2022.

Peru

According to ProHass, Peruvian avocado exports are expected to increase 13% in 2023; that growth was seen in the first three months of the year. This will pressure exporters, as concentrated arrivals in Europe (Peru’s main destination market) between June and August have led to very low average prices in the past three seasons. In addition, the US market may be less of an option for Peruvian exports than in 2022, when it served as an alternative destination due to lower Mexican and Californian supply. This year, both Mexican and Californian supply have recovered, leaving less room for Peruvian avocados to supply the US market. However, efforts toward market diversification will continue to reach new destinations, with a particular focus on Chile and Asia.

One of the key points to take into account in 2023 and beyond is that the planting of new area has declined since the 2021 season. Figures above 4,000 hectares per year are a thing of the past. Growth will continue, albeit at a slower pace. New efforts will be put into orchard handling in order to enhance quality and yields, improve prices, and lower production costs.

Colombia

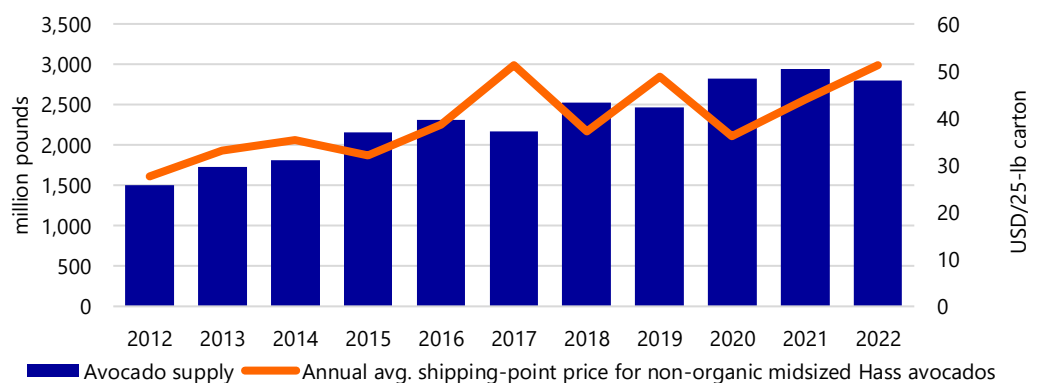
Colombian avocado exports reached 99,000 metric tons in 2022 and, according to Corpohass, should increase 25% in 2023. Market diversification will be a key factor for 2023 and beyond, as Europe reduced its market share from 94% in 2021 to 78% in 2022. Exports to other countries, such as the US, China, and Chile, will increase in future seasons while the industry works toward achieving better efficiencies in production.

North America Will Remain the Largest Production and Trade Area for the Foreseeable Future

US Market To Absorb Increasing Quantities, but Likely at a Lower Price

The ratio of imports to consumption in the US avocado market has hovered around 90% in recent years. Avocado availability during the first half of 2022 was unusually low, and prices remained elevated for several months, reaching the highest annual average price in years (see Figure 15). Since late summer 2022, avocado arrivals in the US market have substantially increased and shipping-point prices for midsized avocados grown in Mexico have remained around USD 30 for a 25-pound carton.

Figure 15: Evolution of avocado supply and shipping-point prices in the US, 2012-2022



Source: USDA, Rabobank 2023

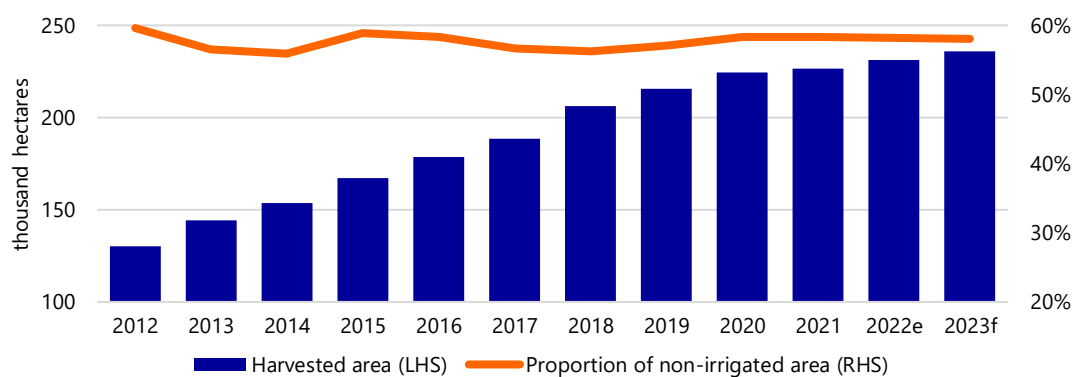
For the 2023 summer and the 2023/34 marketing year, prices are likely to remain at a level similar to those averaged in 2018 and 2020, as the California season is delayed and expected to extend

until late summer. This, and increased shipments from Peru, will keep the US market well-supplied during the transition of the season (June-July) in Mexico.

No Country Will Replace Mexico as the Largest Producer and Exporter Any Time Soon

Although growth in planted and harvested area will slow significantly in the next few years, Mexico will continue to hold the banner in terms of avocado production and exports. Some factors, such as the limited availability of water and high-quality land and government restrictions on land-use change, will impact growth in places like Michoacan. Harvested area in Mexico will likely be around 235,000 hectares, up roughly 63% compared to the area harvested in 2013. Although harvested area is not likely to expand much further, average avocado yields have trended upward in the past few years, signaling that production growth will come mainly from increased yields. While irrigated land accounts for about 42% of total harvested area, according to government figures, the remaining 58% is only rain-fed (see Figure 16).

Figure 16: Harvested avocado area in Mexico, 2012-2023f



Source: SADER, Rabobank 2023

As the avocado market has become more competitive, and as margins are likely to be under pressure in seasons to come, growers must innovate practices in the field, as well as harvesting and packing, in order to be more efficient. While the US will continue to be the primary destination for avocados grown in Michoacan and Jalisco, the only two states certified to export to the US, diversification in destination markets will be key to dilute the risk of putting all avocados in the same market. As marketers in destination markets such as the US have increasing avocado-sourcing alternatives, bargaining power is gradually shifting to the buyer side.

Water and Sustainability

Water usage in avocado production is a widely discussed topic. Partly because of this, avocado growers have made efforts to improve water efficiency. Irrigated water usage differs highly around the world, depending on different climates and growing conditions. Tropical countries, such as Colombia and the Dominican Republic, present lower values in terms of irrigated water use, as there is sufficient rainfall. Meanwhile, countries with marked dry seasons or rainfall limited to specific months of the year, such as Chile, Israel, and South Africa, present higher water footprint values. However, it must be highlighted that they also have the highest use of advanced irrigation systems in their orchards. In between, there are countries, like Peru, where important production areas are in dry regions with irrigation systems that facilitate sustainable production. Still other countries, like Mexico, have significant parts of production watered by rainfall. In the coming years, it will remain important for the avocado industry to address water usage and other sustainability issues, to educate consumers and the general public about these issues, and to put them in a broader perspective, as there seem to be many misperceptions.

Imprint

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