

AVOCADO

About to Embark on a Balancing Act



World Market Prospects for the Medium/Long Term (2021-2028)

Avocado

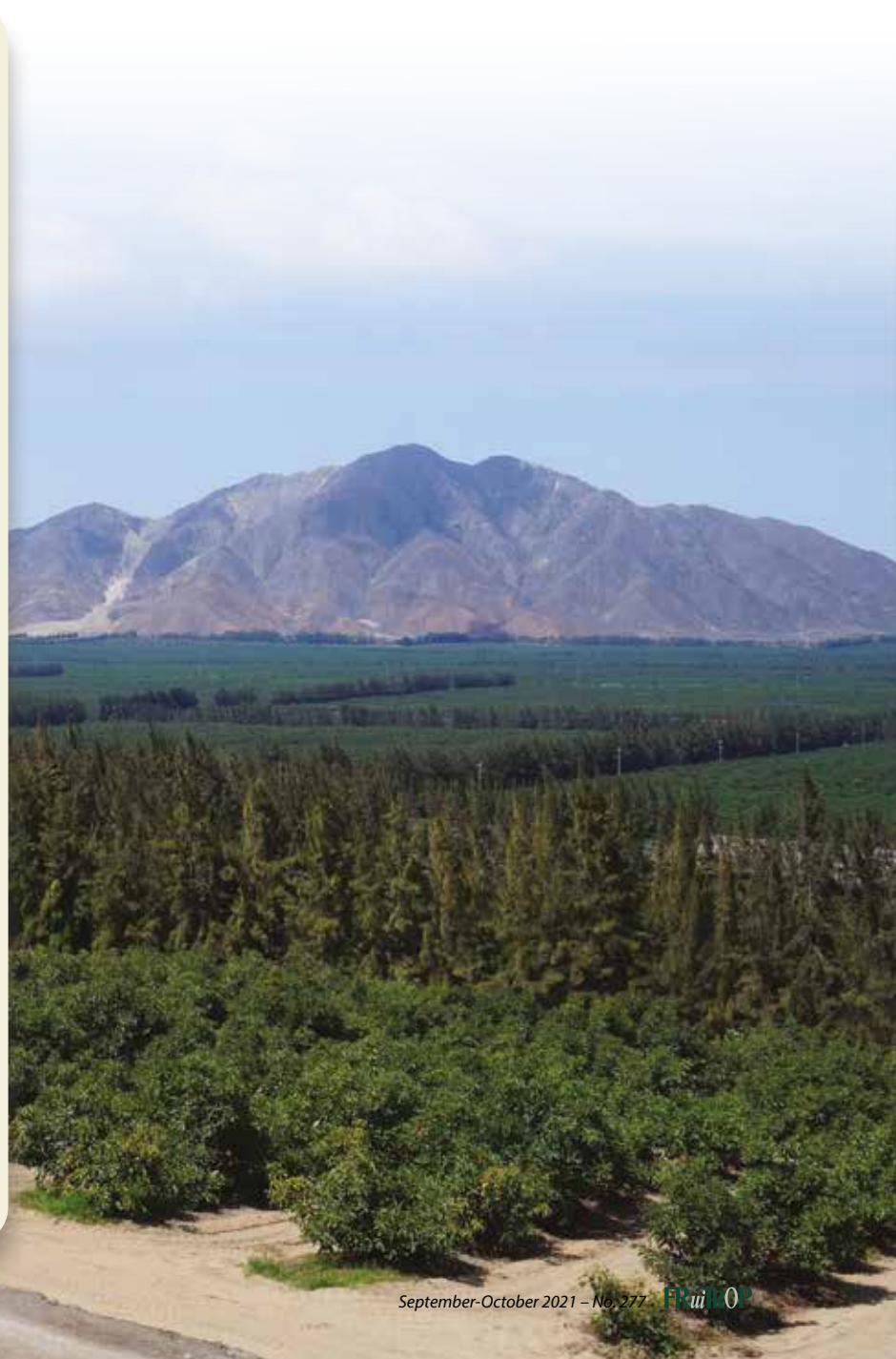
World market prospects for the medium/long term (2021-2028)

Paradigm shift

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Has the avocado market lost one of the characteristics that made it so unique in the fruits and vegetables trade: being governed by demand? In any event, the massive surface area expansions in recent years are raising questions. Bearing in mind the economic and social challenges posed by this major fruit industry, FruiTrop has decided to initiate a prospective work, the objective of which is to analyse the evolution between supply and demand over the medium/long term (2021-2028). Also taking into account the intrinsically fraught nature of this type of exercise, we have opted to build this study based on field data (cultivation areas, production systems, yields), an approach which seems less haphazard than the purely statistical analyses presented in some works. The initial trends arising from this exploratory work indicate that the supply growth dynamic is now greater than the demand growth dynamic. This study is intended to be an initial step towards a more advanced and ideally collaborative model, built with the help of and for professionals from the avocado world.

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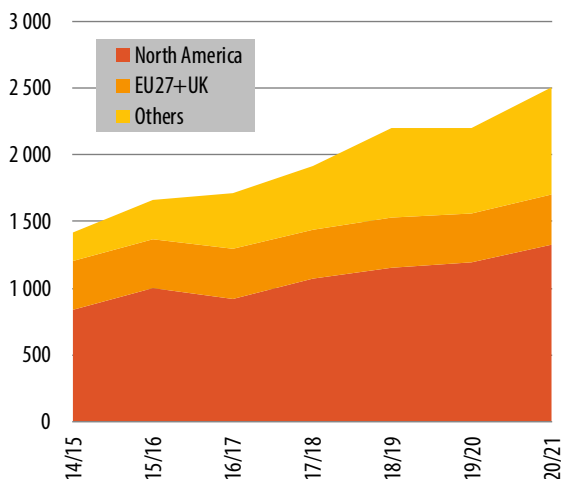
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Demand dynamic still extraordinary, but on a narrow base

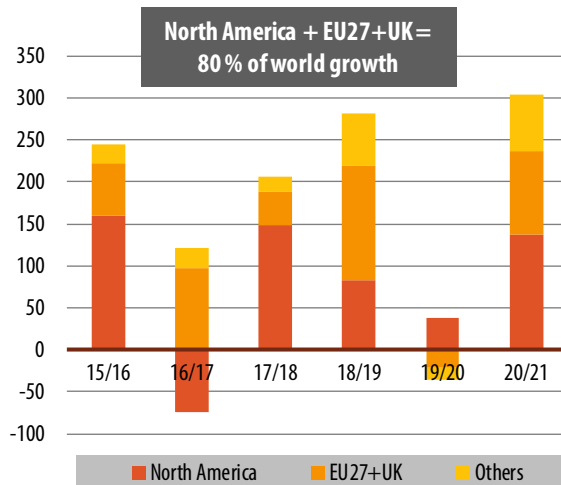
Why embark on such a study, when the host of parameters to factor in and the difficulty – or even impossibility – of measuring some of them make for a wide margin of error? Although aware of the challenge, we believed it was essential to try to determine a medium-term evolution trend, since of course the fundamentals of the world market have undergone great changes in recent years. True, demand might indisputably continue to be given as an example – if not “The Example” – of the vitality in the fresh fruits and vegetables trade. The massive background work carried out by professionals to promote the product and modernise the supply available to consumers, with ripening and varietal enrichment, has undeniably borne fruit. As proof, even the Covid-19 pandemic, despite cutting off the market from a large part of the major OOH segment (more than 30 % in the USA), did not manage to even shake the growth trend in volumes sold (+ 11 % in the EU27+UK, and + 6 % in the USA in 2020!).

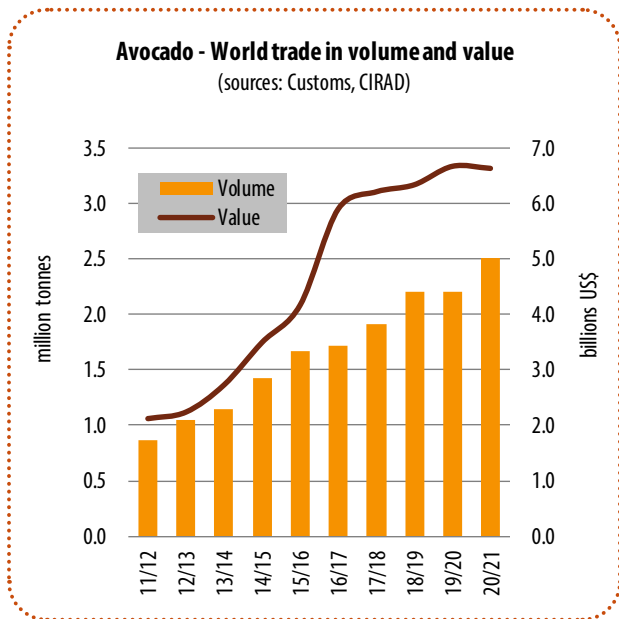
Nonetheless, we should emphasise that the world avocado trade still relies on a narrow base of just two big markets, namely the USA and EU27+UK, which take in 80 % of international trade, and were behind 80 % of the growth in imports over the past five years. To what extent will they continue to act as the driving force in the coming years, with no major relays for growth clearly apparent? The question has to be asked, especially since the rate of rise in consumption is inversely proportional to volumes taken in.

Avocado - Evolution of major world markets
(in 000 tonnes | source: Customs)



Avocado - Growth of major world markets
(in 000 tonnes | source: Customs)





The first signs of a change in tempo upstream

But we also need to turn our attention to the upstream segment, indeed probably all the more so. Visit practically any producer country, and you can observe the practically generalised planting dynamic... often on a massive scale. We should add that these new cultivation areas are in most cases set up on solid foundations, combining high-quality plant stock (clonal plants) and a good technical level or even high-tech production system, guaranteeing good productivity. The first signs of this production surge have started to emerge: the market balance, so strong during the latter half of the 2010s that we often registered simultaneous two-figure growth in both volumes and sale price, has clearly weakened.

Periods of oversupply have started to appear, especially on a European market that is more open and much less active in promotional terms than its US counterpart. The late May/early June period has for the past several years become high-risk on the Old Continent, with combined shipment peaks from the summer origins, especially from Peru. Similarly, the pressure is seeing a distinct rise during Q4, with the expansion of the Jalisco and Colombian cultivation areas.

This weakening seems to be a worldwide phenomenon, affecting everywhere from Europe to the other side of the world: in 2021-22 Australia is preparing to see its green gold transform into a green tide, with the arrival of an extraordinary first season of local production, which seems no more than an icebreaker given the planting carried out in recent years. This trajectory will not be without consequences for New Zealand, and possibly the neighbouring markets in Asia, the main marketing alternative for Kiwi exporters.

Other examples could be mentioned, and a major global indicator can summarise this weakening trend: since 2017-18, world trade turnover has risen much less quickly than volumes. It actually stagnated between 2018-19 and 2020-21, while imports increased by approximately 300 000 t in terms of volume – true, in the highly particular context of the Covid pandemic in 2020-21.

This ray of converging trajectories pointing to a market deterioration, though fortunately still temporary for now, emphasises the need to assess the direction that world production could take in the coming years. Is there any need to reiterate that the stakes are particularly high? In economic terms of course, since arboriculture deals in big investments which are calculated over the long term. But also in social terms, in particular in the case of the avocado, whose production base largely comprises small and medium growers (more than two-thirds of the cultivation area of Michoacán, by far the world's leading production region, are farmed by growers owning less than 10 ha), and given the volume of labour necessary (generally between 3 and 5 ha per FTE, not to mention packing and all the associated services).



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Methodology: particular attention paid to basic data

We should set out the working method adopted for this study – although it might seem daunting – to properly understand its strengths and weaknesses. To make a projection of production, we took particular care to identify and collect the most reliable data possible to evaluate the cultivation areas and their expansion prospects in each country. In the first instance we used the survey statistics from the professional organisations or official surveys (cross-checking information with other sources for some countries). In the absence of this information, we relied on the most representative professionals, cross-checking their information or in exceptional cases relying on proxies (such as plant sales of the main nurseries). Overall, we believe that the information gathered ranged from good to decent in terms of reliability, for more than 90 % of world surface areas. The countries with a significant export potential over which there is large uncertainty are Kenya and Morocco.

We then worked in three steps to go from raw surface area data to the production projection. The first step consisted in estimating, for each year in the projection, the actual productive surface areas, as opposed to those comprising young cultivation areas not yet in production. To do so, we opted for a simplified overall hypothesis to estimate how the young orchards come into their prime: first production in the 3rd year of the cycle, with 10 % of the production potential, a third of the potential in the 4th year, two-thirds in the 5th year and 100 % in the 6th year. These “active” surface areas were then increased by an average export yield in full production defined for each country, again thanks to the information collected in the field or from professionals (with a hypothesis of this yield increasing from 2025 for certain countries, given the improvement in production systems).

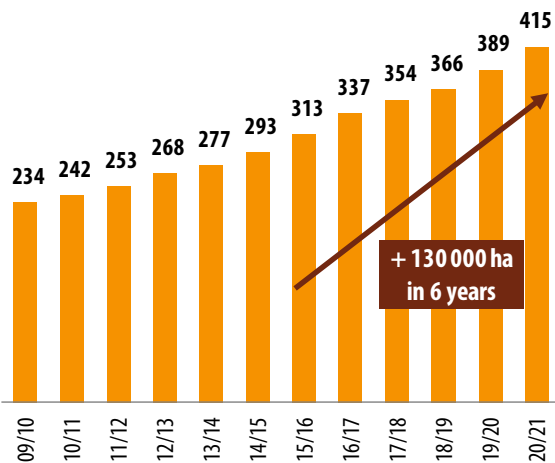


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Avocado - World planted areas of export varieties
(in 000 hectares | professional sources, CIRAD)



World cultivation area evaluated at 415 000 hectares

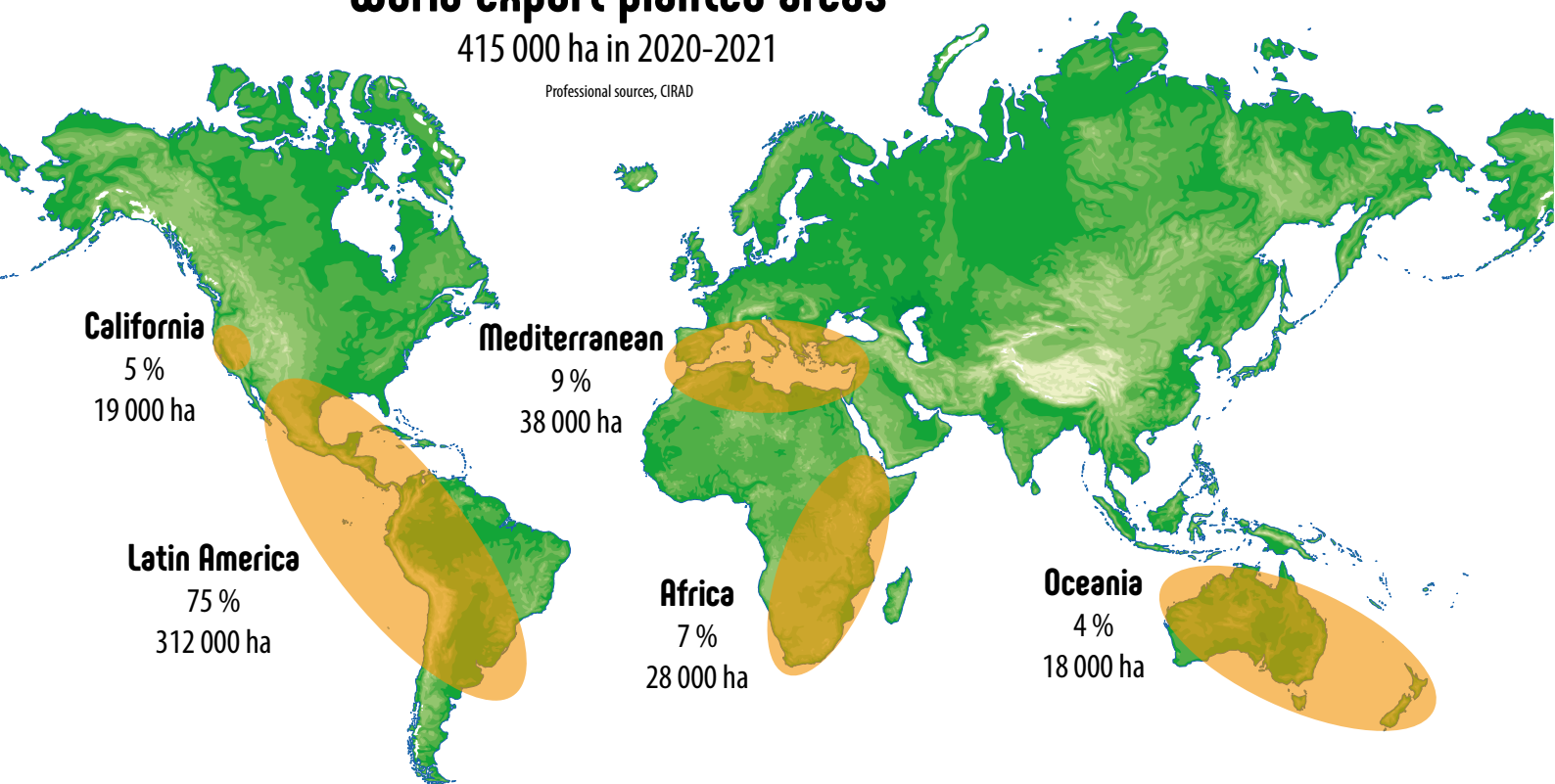
The panorama of the world industry arising from this study is as follows: the world export avocado cultivation area (Hass, Hass like and green varieties excluding the West Indian races) covers approximately 415 000 ha in 2021. The apple never falls far from the tree, as the saying goes, and three-quarters of surface areas are situated in Latin America, the avocado's zone of origin (with half of surface areas in Mexico alone). The Mediterranean, Africa, California and Oceania follow in the rankings in decreasing order, with for each of these regions a proportion of the world cultivation area estimated at between 9 and 4 %. The expansion in surface areas has distinctly gathered pace since 2015, with the world cultivation area gaining nearly 130 000 ha during these six years (i.e. an average of 21 500 ha/year). Latin America was behind three-quarters of growth registered in the past five years (+ 74 000 ha), followed by the Mediterranean (+ 12 000 ha), Africa (+ 8 000 ha) and Oceania (+ 6 000 ha).

AVOCADO

World export planted areas

415 000 ha in 2020-2021

Professional sources, CIRAD



Entering a period of strong production growth

The analysis shows two important points. On the one hand, the theoretical annual growth rate (i.e. derived from calculation) in exportable potential has increased considerably in the past few years, going from approximately 160 000-175 000 t in 2018 and 2019 to 275 000 t in 2021. On the other hand, this rate should maintain a similar or even higher level, throughout the projection (range of 270 000 to 310 000 t/year).

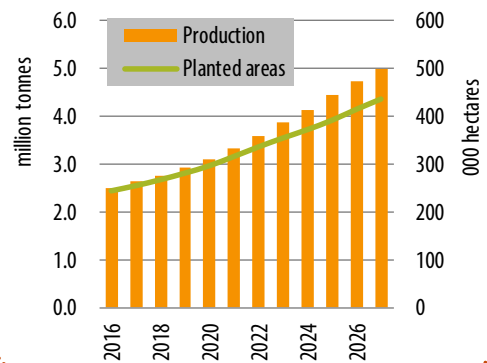
This marked change is due to the combined rise in two parameters. On the one hand, the “active surface area”^{*} added onto the world cultivation area every year practically doubled between 2016 and 2021, going from approximately 11 000 ha/year to 20 000 ha/year since 2020. It should maintain a similar, very high footing throughout the projection period, to peak at 22 000-23 000 ha in 2025 and 2026. On the other hand, we factored into our hypotheses an overall yield increase in certain countries, reinforcing this upward trend (average world yield going gradually from 10.5 t/ha in 2021 to 11.4 t/ha from 2026).

^{*} sum of all surface areas in production, weighted by production level for young orchards not yet reaching their full potential. By way of example, a one-hectare orchard in its fifth year is equivalent, according to our hypotheses, to an active area of two-thirds of a hectare.

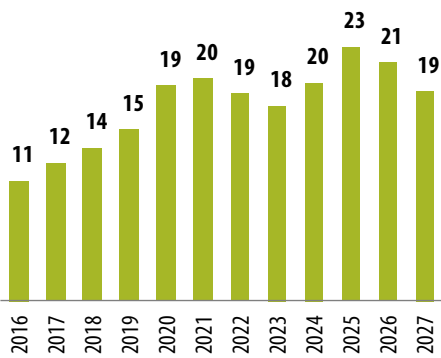


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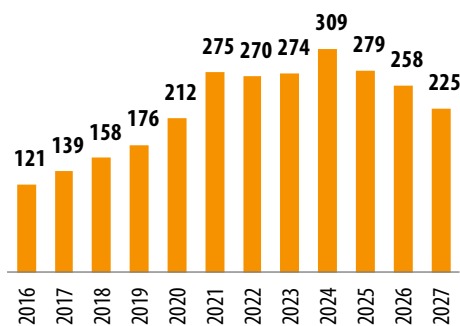
Avocado - Projection of global exportable production and planted areas in full production
(source: CIRAD)



Avocado - Annual growth of world planted areas expressed in hectares at full production
(in 000 hectares | source: CIRAD)



Avocado - Annual growth of world exportable production linked to the annual growth of planted areas and the growth of yields applied to the entire planted areas
(in 000 tonnes | source: CIRAD)



Projecting demand

What about the evolution in demand? The evaluation method is more basic, and more fallible. For lack of a methodological alternative, we extended the evolution trends of the world’s main markets for the past four seasons (disregarding the atypical 2020-21 season marked by the Covid pandemic, although it ultimately remains on the same lines as in previous years in terms of volumes). Nonetheless we chose to keep a critical eye to these data, in particular for the major world markets.

We decided to retain the very high growth rate for the US market (+ 60 000 t/year on average over the last 4 seasons), despite already very high consumption per capita levels (national average 3.7 kg/capita in 2020). Several parameters led us to make this rationalised choice. On the one hand, the promotion budgets are enormous, with approximately 100 million dollars in 2020, combining all the contributors), while the avocado’s major health assets, due to a unique combination of high-quality fatty acids and fibres, should be an increasingly powerful promotion lever thanks to the results expected from the ongoing clinical studies. On the other hand, the population will increase by 30 million additional potential consumers by 2030, the small-size net bag segment is a powerful growth vector, and the base of “super consumers” (28 % of households, with 70 % of sales) is expanding, and winning over the non-Hispanic population. So all the ingredients are there for a “Conquest of the East”, where consumption remains well below the national average and consumption in the West Coast States (between 2.1 and 3.0 kg/capita in 2020, as opposed to 4.1 to 7.8 kg).



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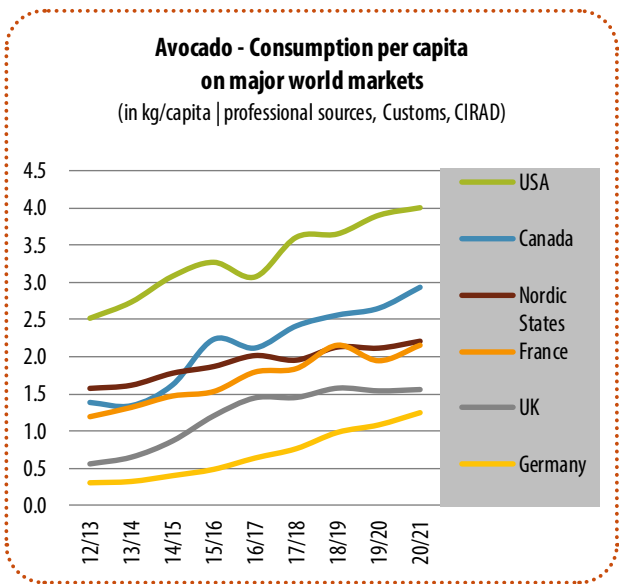
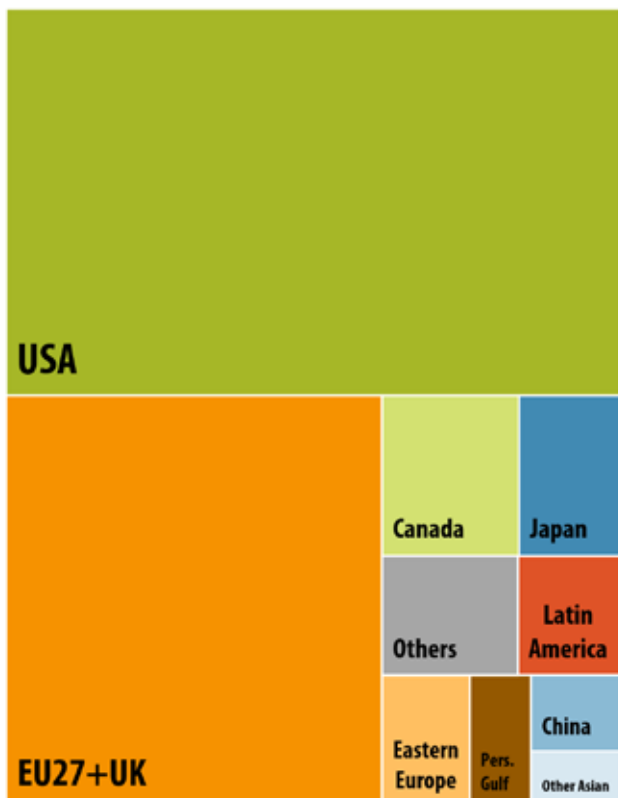
For the EU27+UK market, we decided to moderate the growth rate (75 000 t average in recent seasons) from 2023-24. The factors leading us to take this decision are as follows. While there is a major reservoir for growth given the difference in consumption from the USA (1.3 kg/capita in 2020 in the EU27+UK, and 1.5 kg for Western Europe, as opposed to 3.7 kg/capita in the USA), the product's promotion budgets are incomparable ("only" a few million euros for the EU27+UK). Furthermore, analysis of the dynamic of the main markets in the region over recent seasons shows slowdown phenomena in terms of consumption growth, or even levelling off, in countries where intake volumes per capita are highest, in excess of 2.0 kg (the Nordic countries since 2015 and France since 2019). Germany, the market's main driving force in recent years, and where intake volumes per capita could reach this level during the period in question, could therefore see its dynamic slow down. In addition, unlike the USA, demographics will not play a driving role (population practically levelling off between 2020 and 2030, according to the latest Eurostat projection, dating from 2019).

Conversely, we chose to bank on the hypothesis of renewed growth on the UK market, which has been practically at a standstill since 2017, considering the end of the uncertainties relating to Brexit and the high purchasing power of the population. Similarly, we adopted the option of the Chinese market emerging from its slumber, given the investment in infrastructures (ripening, cold chain) and in consumer edu-

cation made by big international avocado specialist groups. We arbitrarily selected a growth of 20 000 t/year throughout the period in question. For all other world markets, we extended the trend from the last four seasons.

The results are as follows. The average rise in world demand, over the four-year reference period in question, from 2015-16 to 2019-20, was approximately 165 000 t. According to our hypotheses, it should rise in the short term to reach approximately 175 000 t, with in particular a return to growth in China and the United Kingdom. Conversely, a deceleration is expected from 2023, with the slowdown in growth in the EU27+UK.

WORLD AVOCADO MARKET 2.5 MILLION TONNES (2020-21)

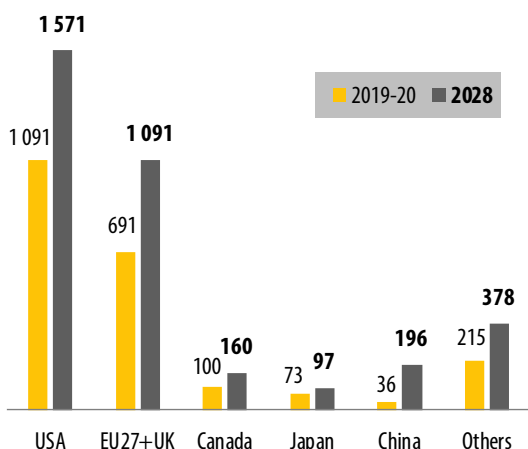


Avocado – Market share in 2020-21 and annual average growth rate (period 2016-17/2020-21) of world main markets

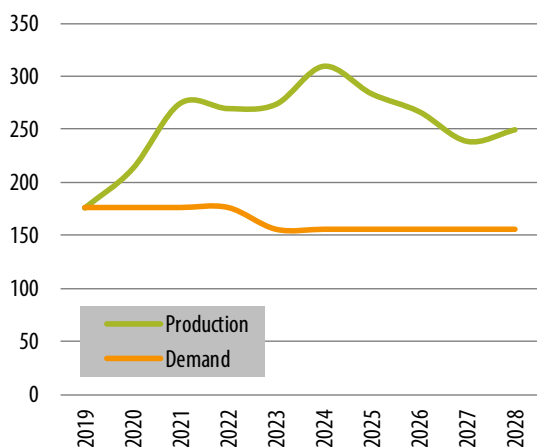
	Market share	Growth rate
USA	49 %	9 %
EU27+UK	31 %	10 %
Canada	4 %	10 %
Japan	3 %	6 %
China	1 %	3 %
Latin America	3 %	4 %
Eastern Europe	2 %	35 %
Other Asian	2 %	27 %
Persian Gulf	2 %	1 %

Professional sources, Customs, CIRAD

Avocado - Evolution of world imports from 2019-20 until 2028
(in 000 tonnes | source: CIRAD)



Avocado - Scenario 2028 : additional production and demand
(in 000 tonnes | source: CIRAD)



Toward a supply considerably in excess of demand, albeit with some pending questions

In view of the uncertainties inherent in this type of exercise, the ambition of this study can only be to describe a trend, as accurately as possible. What emerges is a break with the previously prevalent equilibrium, between a supply which since 2021 has entered a period of increased annual growth of approximately 275 000 t/year, and a slightly rising demand (at least until 2023), but with a much lower level, of approximately 175 000 t/year. This is a major gap of approximately 100 000 t from 2021, which could exceed 150 000 t in 2024, before dropping back to a footing of close to 100 000 t at the end of the period. Every scenario appears to be beyond the margin for error, confirming an oversupply trend, or at the very least an equilibrium point between supply and demand on a lower price footing than those seen in recent years.

Nonetheless, we have to emphasise that other factors, currently impossible to quantify, could contribute to widening or narrowing this gap. All we can do is mention them in the form of questions. Will climate change mitigate the predicted growth in production? It already has a major impact, especially in certain countries like Chile or in California. Zones with Mediterranean type pedoclimatic conditions, which represent approximately 20 % of the world's cultivation area, could in particular be exposed to a big increase in water stress, leading to a big fall in yields, or even uprooting of orchards. The increase in the frequency of extreme climate phenomena (floods, heat-waves) could also have an impact. Furthermore, will the shift toward more local consumption, reinforced by the pandemic, contribute to slowing down demand for imported products, which generally includes the avocado? Similarly, will regulatory changes (in terms of packaging and the possible implementation of sustainability criteria such as carbon balance), or the upgrading of the certification expectations of the big supermarkets reduce access to certain markets, and thereby scale back the export dynamic? Finally, what about the impact on sales of attacks on the product's image, especially on a market such as Europe where it is insufficiently defended?



A world market rich in resources

This alarm signal must not be interpreted as pointing to a shipwreck, since the market has many more resources. Nonetheless, it needs to be heard. Promotion budgets must be boosted in Europe, while the industry has the financial resources, to break the glass ceiling which the highest-consuming markets on the Old Continent seem to be approaching. The Asian diversification markets, but also the regional markets in Latin America or local markets, also have a large and under-exploited growth potential. Furthermore, processing is another strong avenue for development (guacamole, frozen pieces, but also cooking oil or oil for industry, demand for which is increasing steeply).



A participatory model to be fine tuned

FruiTrop proposes to continue working on this model, and regularly publish updates, with full transparency. On the one hand, the survey data for some countries need to be refined, as do the hypotheses for the young orchards entering their prime, using data specific to each producer country. On the other hand, it seems important to specify the times of year when production will see the biggest changes, which means having more precise information on changes in surface areas at regional level for many of the countries in question. Finally, the sizing dimension also seems important, and requires the definition of a standard size profile for each country or major production zone. To ensure that these ambitions become a reality, FruiTrop will continue to reach out to professionals worldwide, to make regular contributions to enriching this model ■