

World Avocado Market Projection Up to the Year 2030 Version 2.0

A bigger production surge than originally forecast

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The results emerging from version 2.0 of our projection of the world market up to 2030 confirm the idea of an imbalance between supply and demand, with the latter being possibly stronger than expected. Nonetheless, the avocado market has major reservoirs for growth, which this structured industry can harness if the upstream and downstream segments rally together to focus on product promotion. The most competitive players in economic terms, but also sustainability terms, will be the best placed to withstand this coming period, which in any event will be harder-fought.

An ambitious project, though greater transparency required for this attractive, rapidly developing industry

In 2021, FruiTrop initiated a work aimed at describing the world avocado market's potential orientation in the medium term. Quite an undertaking, such is the complexity of producing high-quality projection work in this field! The world avocado trade is based on no fewer than twenty countries with different pedoclimatic conditions and production systems. Furthermore, even when present, the basic information (cultivation areas, yields, etc.) required to produce a work of this sort is not always top-quality. As a final difficulty, this developing industry has shifting contours which are hard to track. The excellent economic results achieved by Hass for most of the 2010s were very encouraging, in a global economic context more favourable to investment in the agricultural field. Hence there was a wave of planting, impressive in terms of magnitude and geographic extent. This is an unavoidable impression from any field visit. And it was to provide a snapshot of the consequences of these rapid changes that we decided to take the risk of embarking on a project of this kind. We deemed it vital to attempt to give potential investors, who are often in addition medium or small producers in this industry, an idea of how the market could evolve in such a changeable context. The need for projection is especially great in the case of arboriculture, an activity with high production facility set-up costs, and no immediate economic returns.

Field-based methodology, to obtain high quality basic data

If the question of "why conduct this analysis?" was self-evident, we also had to answer the question of how to make it a success. There too, we were presented with a natural choice, given the poor-quality studies already published, based on trend extensions, themselves constructed without any critical analysis of the data used, which were of indeterminate, often poor quality.

We opted to adopt a field methodology for the upstream segment, going out to meet growers from the major countries operating on the world market. This surveying work conducted in Latin America, the USA and Mediterranean enabled us to better understand the production systems, identify the strong points and challenges that could affect the future development of their industries, and select the basic input parameters for our model (cultivation area, planting rate and yield). Furthermore, the data used for some countries were completely original and drawn from these visits. Much of this collection task enjoyed the support of the Hass Avocado Board. This surveying work is ongoing, both to cover the production zones not yet visited (some of Africa, Oceania), and to update the data.

**SEE THE
PROJECTION VERSION 1.0
IN FRUITROP 277
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**WORLD MARKET PROSPECTS
FOR THE MEDIUM/LONG TERM
(2021-2028)
PARADIGM SHIFT**

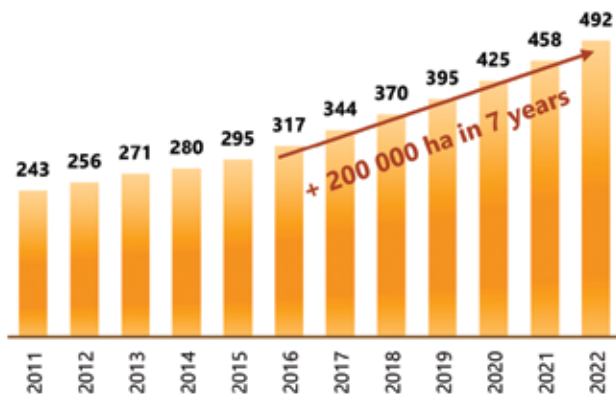




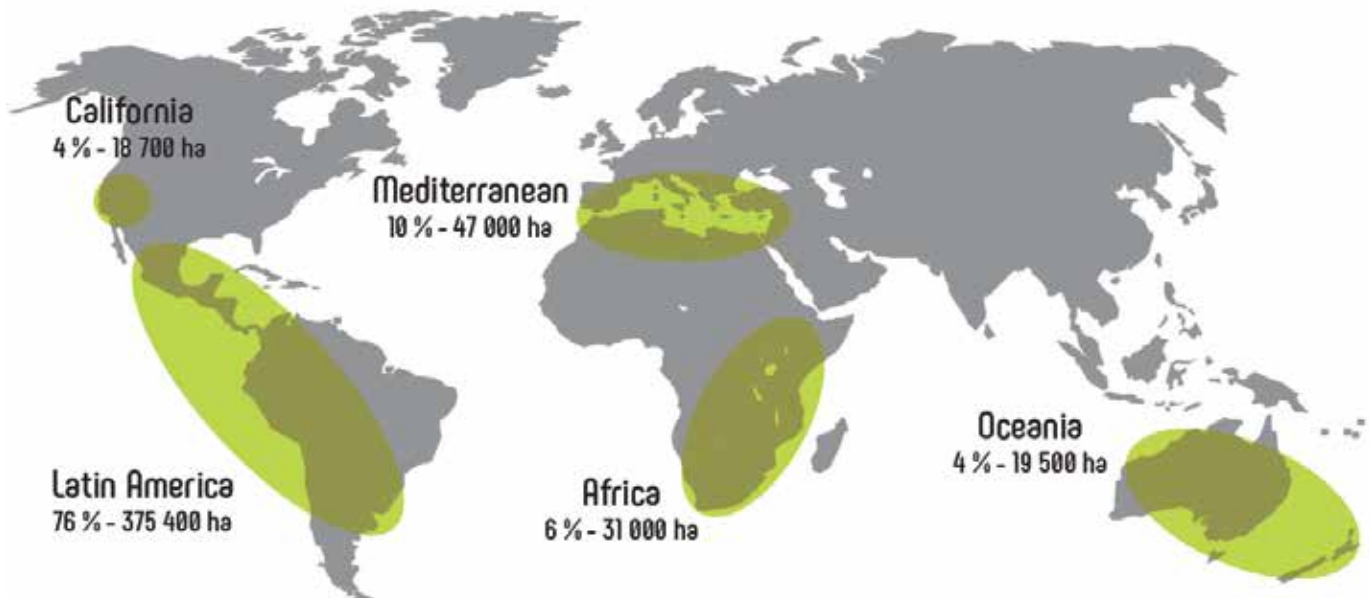
More refined basic data and a more advanced model for the production side

With these new data, we were able to build a version 2.0 of our world avocado development model. Several elements were added onto the version 1.0. First of all, Prohass issued a new estimate of Peru's planted area, more refined thanks to a new methodology better able to survey "small orchards" (+ 10 000 ha between 2021 and 2022, incorporating both new planting carried out during this one-year period, and the methodological change). On the other hand, we fully reviewed the data we had for some countries, following the field inquiries conducted over the past two years (Colombia, Spain, Morocco and Portugal). We also integrated into the model some small exporter countries not previously counted: Greece, Ecuador and Guatemala, whose combined surface areas are far from negligible, representing nearly 10 000 ha in 2022. Finally, the planting rate was higher than we had predicted in 2021, and to a lesser degree in 2022 for some production zones, despite less encouraging market prospects (Michoacán, Peru in 2021). Besides these basic parameter changes, we also refined the calculation, considering a specific young orchard production progression model for each country, instead of the simplifying global model used in version 1.0. This distinguishes regions where trees reach their full potential in 5, 6 or 7 years.

Avocado - World planted areas of export varieties
(in 000 hectares | sources: Cirad, professionals)



AVOCADO - World planted areas of export varieties* : 491 600 hectares



*Mainly Hass and Hass like, Fuerte, Pinkerton, Ettinger, Nobel, Zutano, Reed, Hardit, Bacon

Professional sources, Cirad

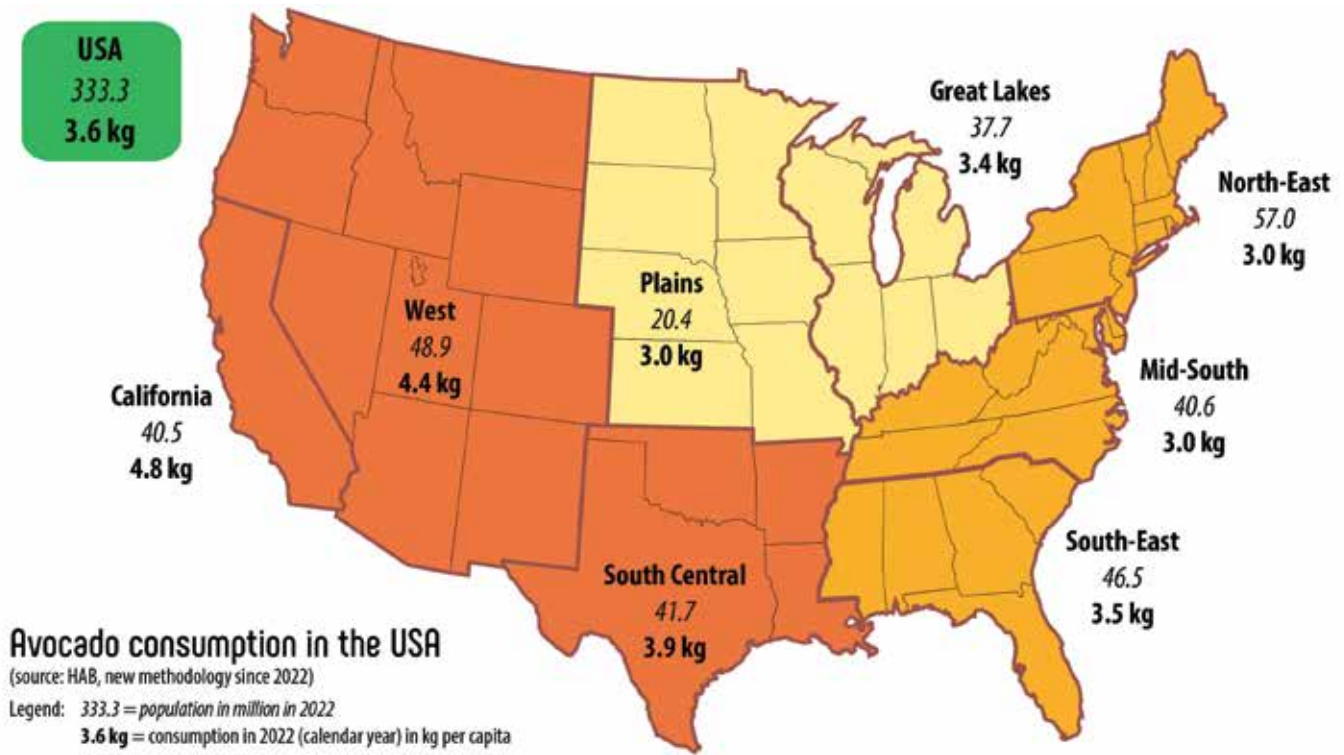


Demand growth hypotheses retained for the USA

The downstream part of this projection is still based on intelligent extension of the consumption trends on the main markets (evolution over the last 4 normal supply years). More precisely, the results of this slightly simplistic calculation are critically analysed, according to the population projections, the actions implemented to stimulate demand (impact of any promotion campaigns) and possibly phenomena observed on the most advanced markets in terms of consumption (e.g. in Europe, a levelling-off trend due to the lack of a very substantial promotion budget, for now).

The return of inflation is a new point to consider in relation to version 1.0. However, we do not yet have the perspective to measure its consequences. Furthermore, the intensity of this global price increase trend should gradually ease off to a large degree, according to the forecasts of the main economic analysis bodies. Hence, we retained the growth figure of 70 000 tonnes chosen in version 1.0 for the USA. While consumption has seemed a bit less dynamic since Mexican fruit regained a good availability level in the second half of 2022, the market still has some serious assets up its sleeve. The promotion budget remains huge (approximately \$75 million in 2023) and intelligently employed, there remains a significant demographic surge (more than 2 million inhabitants per year up to 2030, largely within the super-consuming Hispano-American group), while the East Coast is still under-consuming in a big way (3.0 to 3.5 kg per capita as opposed to 3.6 kg nationally, and as much as 4.4-4.8 kg in the West).

Avocado - USA + Canada - Evolution of imports (July to June) (in 000 tonnes) | source: US Customs

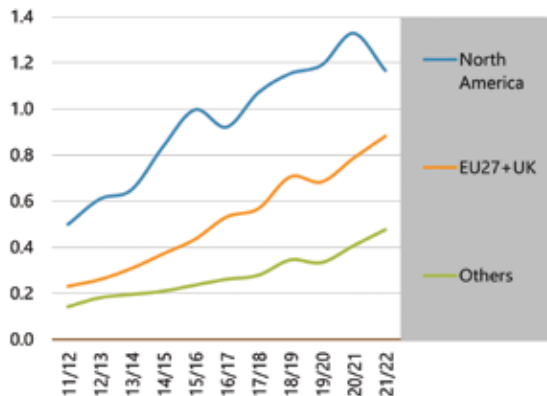


VERY DYNAMIC WORLD AVOCADO IMPORTS

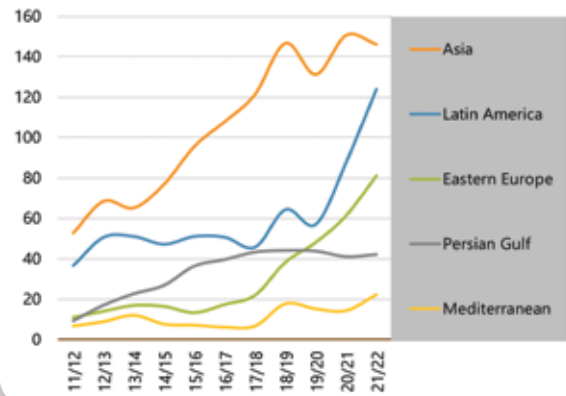
Avocado - World - Evolution of imports
(in 000 tonnes | sources: Comtrade, Eurostat)



Avocado - World - Main markets imports
(in million tonnes | source: Customs)



Avocado - World - Imports - Other markets in details
(in 000 tonnes | source: Customs)

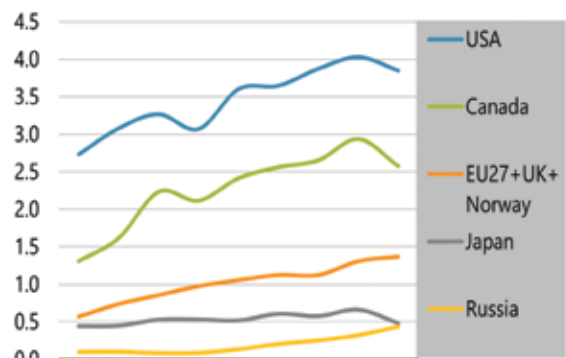


Avocado – Average annual growth in volume*

Markets	in tonnes
USA	67,000
EU27+UK	71,000
Canada	7,000
Japan	2,400
China	2,500
Latin America	10,000
Eastern Europe	13,000
Other Asia	3,500
Persian Gulf	-
Others	7,000
Total	183,400

*2016-2018/2020-2022 or 2015-2017/2019-2021 Source: Customs

Avocado - Consumption on main import markets
(in kg/capita | sources: Customs, professionals)

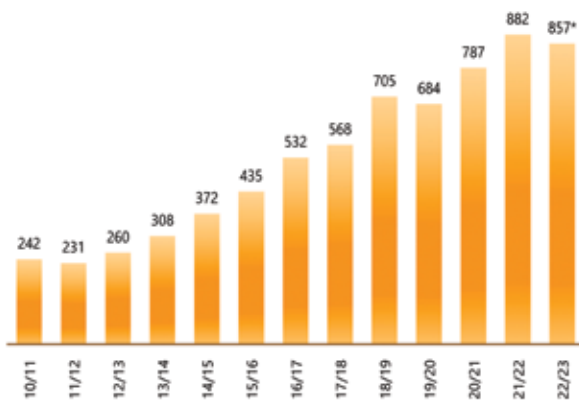




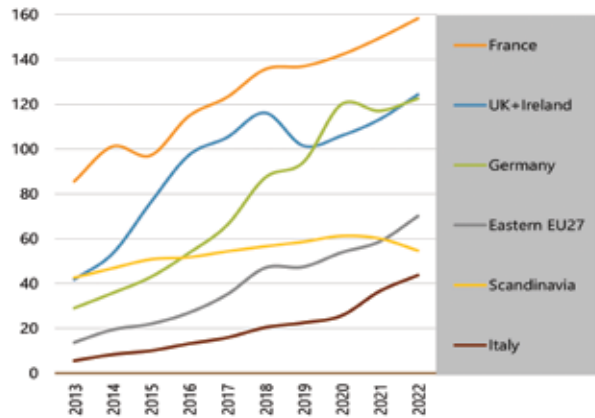
A slightly more marked growth slowdown in the EU27+UK

For the EU27+UK, in version 1.0 we reckoned on slightly less lively growth in the coming years, due to the levelling-off phenomenon in terms of consumption observed in the most developed markets in Northern Europe. For version 2.0, we opted to slightly boost this trajectory in the short term. Inflation is considerably higher than in the USA, and the promotion budget remains infinitely more limited, despite good growth prospects with the probable arrival of new contributor countries to the WAO. Furthermore, the consumption figures from 2021 and 2022 show that some markets, Germany chief among them, are no longer playing their driving role to the same degree in this inflationary context. The panel data, unfortunately available for France and Germany only, show a deterioration in certain underlying indicators since 2020: a big fall in the product's penetration among the less well-off social classes, and in the case of France, a big loss of interest in the avocado among young people. Hence we factored this in by reducing growth from its current 70 000 tonnes per year to 55 000-65 000 tonnes per year in 2023 and 2024, with a bounce-back expected in 2025.

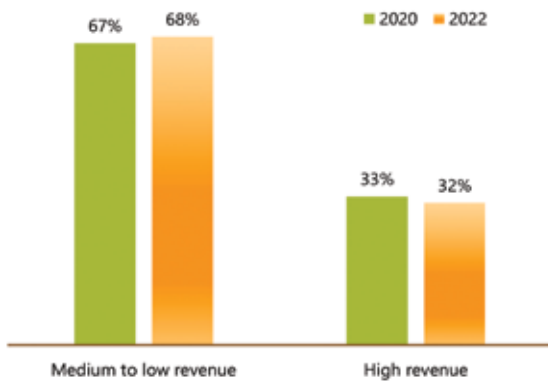
Avocado - EU27+UK+Norway+Switzerland - Imports
(* estimate | in 000 tonnes | source: Customs)



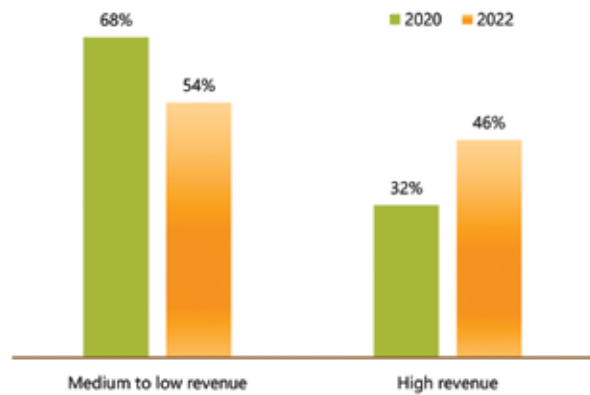
Avocado - EU27+UK - Evolution of consumption
(in 000 tonnes | source: Customs)



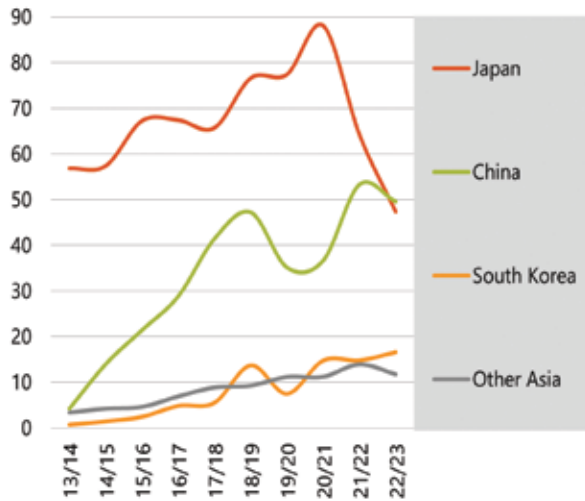
Avocado - France - Sales according to household income
(in % of total sales | source: panel)



Avocado - Germany - Sales according to household income
(in % of total sales | source: panel)

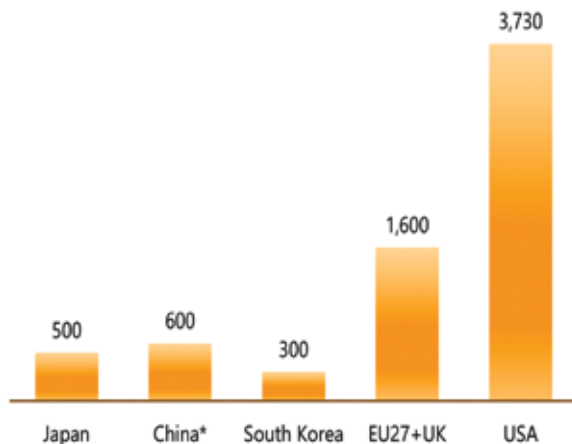


Avocado - Asia - Imports
(in 000 tonnes | sources: Trademap, national Customs)

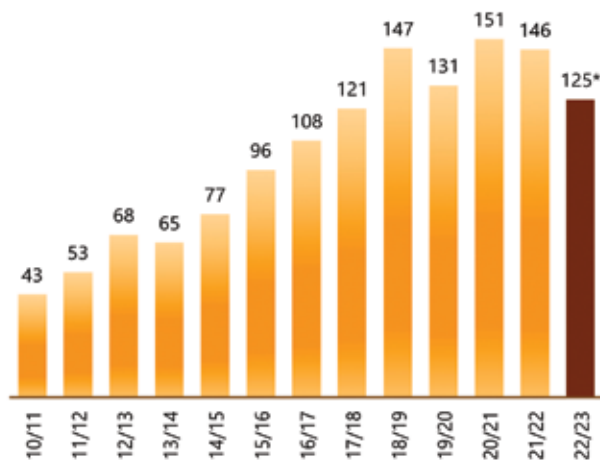


Avocado - Asia and main markets - Consumption in 2022

(* China: households with annual income >34 000 US\$ = 100 million inhabitants | in g per capita | source: Customs)



Avocado - Asia - Imports
(* estimate | in 000 tonnes | source: Customs)



Slightly more optimistic hypotheses for Asia

In version 1.0, we had wanted to assume that the enormous potential represented by the Asian markets would start to show through over the period 2023-2030, despite nearly flat-lining completely in recent years. The inhabitants of this continent, though representing 60 % of the world's population, currently take in just 5 % of the world avocado trade (imports of 140 000 t in 2020-21). We have retained this take-off hypothesis in version 2.0, and even revised it slightly upward. On the one hand, while China remains a marginal player, imports regained a bit more vitality in 2022, though the last severe Covid-related restrictions had barely been lifted. Furthermore, the medium-sized markets (South Korea, with probably 17 000 t in 2022-23) and small-sized markets (Malaysia and Singapore, with 4 000 t to 5 500 t apiece) are continuing to show modest yet steady growth, while new consumer countries are starting to discover the avocado (Thailand and most recently India). Hass consumption remains very under-developed in these countries, ranging for the most advanced from 300 g/capita in South Korea to 600 g in China (taking into account only the 100 million inhabitants with an income of over \$34 000/year). There remains the issue of Japan, where conversely, consumption has been distinctly on the slide since 2021 (imports going from nearly 90 000 t in 2020-21 to probably less than 50 000 t in 2022-23). We regarded this to be a temporary downturn, assuming that the market would regain its previous growth tempo in the short term.



A production surge and greater imbalance than expected

The main lesson to draw from this version 2.0 is that world production growth will be stronger than previously expected. According to our calculations, the exportable potential should rise by approximately 400 000 tonnes per year between 2023 and 2025, i.e. 2.5 to 3 times more than the tempo seen during the latter part of the 2010s. It could then decline between 2025 and 2030, to reach a level of between 210 000 and 260 000 tonnes. This boom is due to both cultivation area expansion (approximately 30 000 ha entering “full production equivalent” per year between 2023 and 2026, as opposed to at most 10 000 to 12 000 ha until 2019) and to the productivity gains (technical improvements implemented on existing orchards, and new plantations generally set up on high production standards). Despite a slightly more favourable demand projection than in version 1.0 (higher growth hypothesis on Asian markets), the imbalance with production is even more marked, with in particular an annual surplus over the period 2023-2027 of between 100 000 and 200 000 tonnes. Overall, the model predicts supply to exceed demand by approximately 25 to 30 % over the period 2025 to 2030. Unlike in recent years, the growth in supply should be greater during the winter season period than the summer season period.

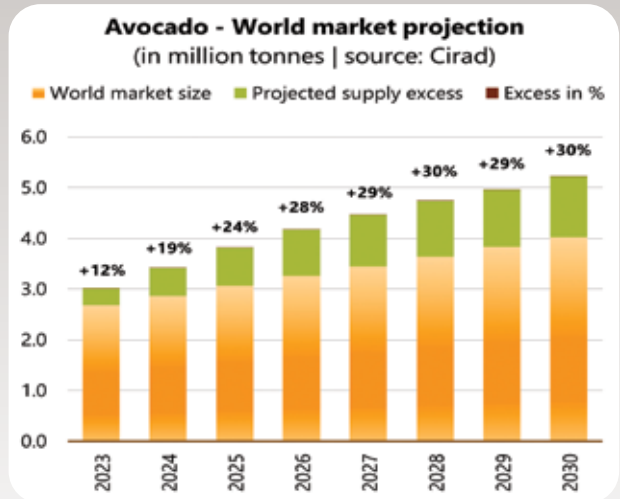
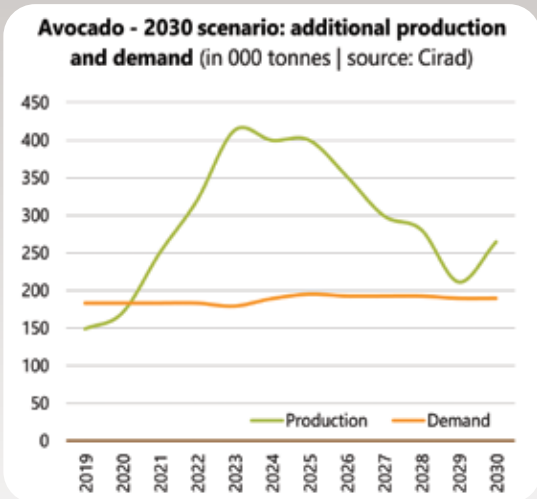
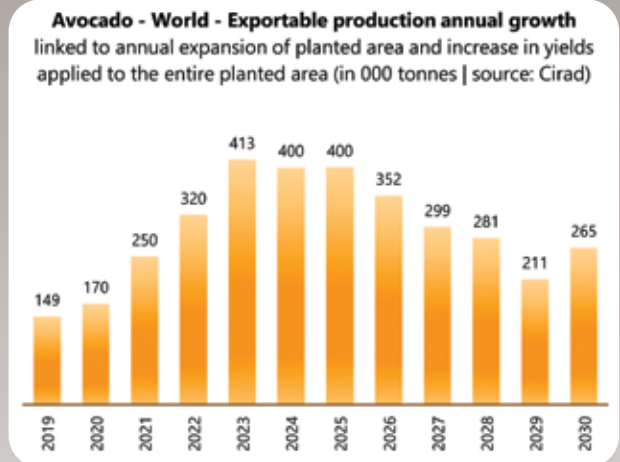
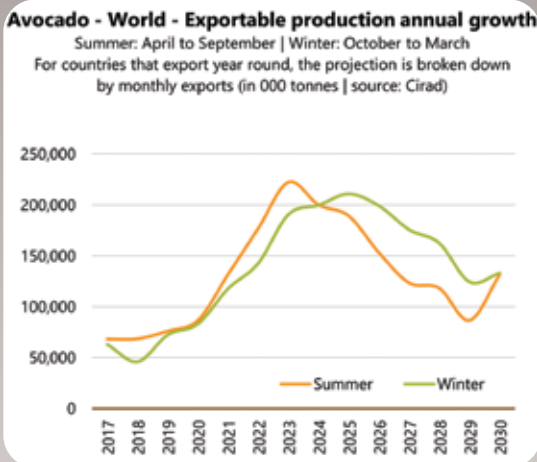
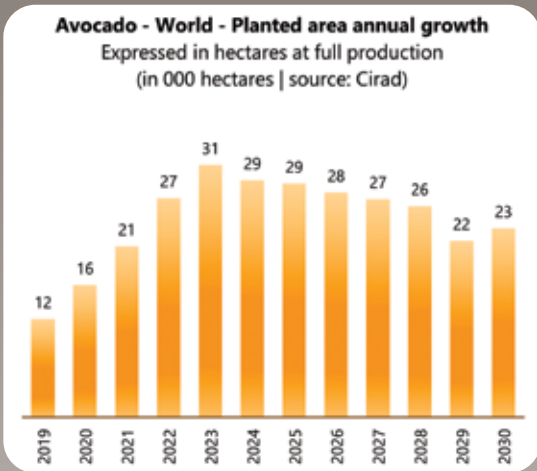


Some uncertainties to be highlighted

While the results presented in this version 2.0 have been refined from version 1.0, it should be highlighted that the margin for error intrinsic to this type of prospective exercise remains high. This study's sole claim is to show a direction of travel. Some parameters, impossible to factor in, could moderate the extent of the production increase. These can only be mentioned, but their effects cannot be quantified. Climate change is of course a key factor, the adverse effects of which on production have been observed, particularly in certain Mediterranean climate zones becoming increasingly dry (Chile, Spain, etc.), or conversely in regions becoming very wet such as Colombia. Outside of these zones, the frequency of extreme climate events (hail, winds, etc.) could also increase. In the downstream segment, what will be the medium-term impact on demand of the new consumer expectations for more local food? And what about the bad press given to the avocado, especially in Europe, which is harming the product's image even though most of the time it is not based on any serious rationale?

PROJECTION UP TO THE YEAR 2030

ENTERING A PERIOD OF STRONG TURBULENCE





A market rich in resources

Nonetheless, in any event, the difference between supply and demand appears to be distinctly beyond the margin for error. While this study is an alarm signal, it in no way points to a crash. The avocado market is rich in resources, unlike many others in the fruit trade world. Thanks to its taste and nutritional qualities, the avocado has an enormous potential appeal. In addition, and again unlike many fruit industries, the avocado industry can rely on structures such as the Hass Avocado Board and the World Avocado Organization to communicate and continue to further build its development and its future.

Furthermore, while the market imbalance seems more marked than two years ago, the industry has made progress during this period. A general awareness of the increasing market difficulties has been established, and the planting tempo has started to fall – true, this is a very recent shift, but it is present nonetheless in major countries such as Peru, Colombia or South Africa. In addition, the WAO has been strengthened with the effective or forthcoming entry of new producer countries. This is a double positive in terms of strengthening the European market dynamic. The promotion campaigns will be powered up thanks to bigger budgets, and the product's defence work will be improved thanks to the efforts initiated to develop a better-supported rationale. This is a fundamental avenue during the period covered by this projection, when the EU27+UK as a whole will for the medium term remain one of the two mainstays of the international trade, alongside the USA. The upstream and downstream segments must continue to strengthen the WAO, which reaches out to more than 500 million consumers in Europe alone, to enable this body to become a powerful tool like the HAB.

Some other world markets are showing interesting dynamics. This applies to Eastern Europe or regions operating with a regional supply such as the southern tip of Latin America (Chile, with vagaries due to changes to its local production, or Argentina), or more recently the Mediterranean (Morocco, Turkey, Jordan). The domestic markets of producer countries are also major areas for development. We can mention in particular Brazil, Colombia or Peru which, via promotion efforts, could start to follow the path beaten by Chile or Mexico, which also have big margins for progress. Finally, we must not forget the processing sector, with in particular growing consumer interest in easy-to-use products (e.g. HPP guacamole), and the rapidly developing avocado oil market for food or cosmetic use.

Competitiveness in the broad sense to the forefront over the coming years

Nonetheless, it is clear that the period covered by this projection will not be a golden age, but it may instead be an age of reason. In this more difficult context of more abundant production, competition will increase and competitiveness will return to the forefront. In the broad sense of the term, where economic criteria, though still central, will no longer be the only ones considered by the downstream sector from its position of strength. Sustainability will also be a key to entering certain markets, with environmental and social indicators increasingly taken into account in suppliers' choices. The main avenues for progress have already been sketched out, in particular cutting carbon emissions, reducing pesticide use, combating loss of biodiversity (deforestation) or water use, a topic apparently hogging the limelight with the increasingly marked effects of climate change. Many of these criteria are already an integral part of the distributors' specifications and of the main certification systems. By way of example, Rain Forest Alliance has banned herbicides and Lidl insecticides and synthetic post-harvest products, as well as a blacklist of prohibited pesticides.

Regulations are not to be left out, with the rapidly evolving European framework being tightened up. In the environmental aspect, besides the already-established pathway to reducing pesticide use, France is setting the tone, with in particular a near-completed "environmental information" bill. Specifically, each product will be allocated an overall summary score for sustainability, like the "nutriscore" already in place for the nutritional quality of foods. This score will be based on assessment via the life cycle analysis (LCA) method of the main sustainability criteria. Regarding social aspects, it is Germany which is at the cutting edge, strengthening its Act on "due diligence", which stipulates that businesses must identify the potential risks of human rights violations (child labour, etc.), in addition to those linked to environmental damage. This initiative could go further in this same country, with a bill under examination for the banana industry – acting as guinea pig – aimed at upholding a "decent minimum wage": though its methodological calculation bases are still under discussion. All or some of these initiatives have already or will be reproduced in EC regulations (the PEV initiative (Product Environmental Footprint), etc.), to strengthen the overall framework of the "green deal". Reciprocity conditions, aimed at stipulating alignment in production conditions of imported fruit with those in force in the EC, are also under study.

So avocado growers must make concerted progress in two subjects: greener and more virtuous production practices, and reducing costs alongside increasing productivity. First, businesses must be able to measure their performance in terms of sustainability, and to draw on recognised indicators based on LCA for environmental aspects, and on the Neighbour method for social aspects (see FruiTrop 285). These are priority points in preparation for the new requirements on certain essential markets such as the European Union, before they quite possibly become conditions for access ■

HASS AVOCADO BOARD AND CIRAD PRESENT...

The Hass Avocado Board and Cirad have published complete and updated descriptions of the avocado industries of the major world exporter countries. In each of these original documents, drawn up based on numerous field visits and contacts with the most representative professionals, you will find key agricultural and trade information: history of the industry, extension and geographic breakdown of the cultivation area, production system and structure, varieties present and harvest calendar, outlets with plenty of details on exports, logistics and finally prospects. The countries or geographic zones covered so far are Peru, Mexico (Michoacán and Jalisco), Chile, California, Colombia, Spain and Portugal). The new releases for 2023 include Morocco and an updated version of the Mexico file.

These documents are available to download for free on: the HAB website www.hassavocadoboard.com or from the FruiTrop magazine www.fruittrop.com

