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## Hass Avocado Production Prospects Managing World Production Growth

*(Editor's Note: This is a lightly edited version of a story that appeared in the September/October 2018 issue of FruiTrop, a European agricultural publication. It is Mr. Imbert's analysis of the world avocado supply situation as it relates to demand. While he sounds an alarm about increasing supplies, he notes demand is growing at the same rate and says increased promotion could further stimulate consumption growth.)*



Calculation based on 2017-2018 volumes

\* Last 4 years average

Source: CIRAD

### The avocado - a lucrative and fast-moving industry

The avocado is seeing rapid development, at the risk of perhaps in the medium term falling victim to its own success. The return of a summer crisis in 2018 on the European Community (EC) market is an alarm signal highlighting two vital points. Demand has limits and world production is progressing rapidly among suppliers to the counter-season market. This latter point, which concerns the summer season, should make us question the supply prospects during the winter season, hitherto low-profile,

before a first accident possibly forces us to do so.

### One million tons of additional exports from Mexico by 2030

The volume increases expected during the 2018-19 winter season are set to usher in more. This is what is revealed by analysis of the Hass worldwide cultivation area. Of course, South America has the clearest growth. Surface areas are continuing to expand at an impressive rate in Michoacán. The cultivation area, covering just over 166,000 ha (hectares) in 2018, has grown at an

average tempo of approximately 10,000 ha per year for the past three years. It is, above all, the eastern and western fringes of the avocado region that are seeing the clearest progress, with the core areas seeing much more limited growth for lack of space.

Jalisco is not to be outdone, with surface areas already reaching 22,500 ha in 2018, and growing by nearly 2,000 ha per year on average for the past three years. It is, above all, the zones close to Ciudad Guzmán which are seeing the biggest progress. Hence according to a projection by the Ministry for Agricul-

**Ton (t) = ~2,200 pounds**

**Kiloton (kt) = ~2.2 million pounds**

**Hectares (ha) = ~2.5 acres**

ture, production should grow by more than one million tons by 2030, to nearly 3.2 million tons. A hypothesis that seems wholly realistic given the average yields in these two zones (9 to 10 t/ha in Michoacán and 15 t/ha in Jalisco), and the average rate of surface area expansion in recent years. According to this same study, the bulk of these additional volumes should be aimed at the international market (export potential 2.1 million tons as opposed to 1.1 in 2017-18).

### **Colombia, following exactly in Mexico's footsteps**

Colombia is following Mexico's footsteps. According to the latest available professional estimate, the cultivation area already has reached approximately 17,500 ha, and is expanding at a rate of approximately 2,000 ha per year. The dynamic is tending to gather pace with the opening of the U.S. borders and the increasingly significant arrival of foreign investors (such as the Peruvian giant Camposol, which has just purchased 350 ha of land, and declared its intent to set up 2,000 ha of plantations in Colombia).

Growth in surface areas is particularly significant in the center of the coffee zone. The country's assets, such as its ideal geographic location for serving both the U.S. and European markets, and its wide production calendar, are attractive; although the lack of road infrastructures (link roads to the secondary network) and port infrastructures remains a weighty issue. Management of heterogeneity of maturity is another technical challenge to address in this

country where some zones can boast multiple flowering, another common point with Mexico.

### **Chile's awakening?**

Chile seems to be emerging from a gloomy spell, when persistent drought brought about a collapse in the cultivation area of more than 5,000 ha (not to mention plantations mothballed by severe pruning). The return of more rainfall and better profitability, thanks to the repositioning on the EC market and on the local market, seems to have caused renewed interest in the avocado. The trend is still limited. It is aimed mainly at the climatically most suitable zones with more abundant water.

### **Growth in surface areas gathering pace in the Mediterranean**

The excellent level of Moroccan exports in 2017-18, and the high Is-

raeli level expected this season, show that the Mediterranean cultivation area also is on the move. Surface areas are reportedly expanding at around 500 ha per year in Israel, with an acceleration in this tempo very likely according to some professionals (700 to 800 ha). Although interest in green varieties remains marked among some producers (especially Reed, with its high yield and value earned on the local market), the bulk of new planting involves Hass or Hass-like. At least half of the expansion is taking place in the south of the country, in the western tip of the northernmost part of the Negev Desert (especially within a radius of 20 to 30 km around Ashkelon).

Similarly, there is a clear dynamic in Morocco, with surface areas expanding at around 600 ha per year, and with Hass now practically the only variety being planted under the development programmes. While plantations are

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continuing to be set up especially in the traditional Kénitra/Larache zone, some also have been developed in the Azemmour region north of Casablanca. The dynamic remains for the most part driven by small to medium-sized producers, with technical support from big players in the sector.

### Spanish cultivation area not all that static

Is the progress in avocado exports from Spain due solely to the country's developing role as a hub? Is the big picture being concealed? In part, since a fine analysis of the avocado sector shows that the cultivation area is getting going (approximately + 650 ha/year). The majority of the expansion in surface areas should not be sought in the traditional production center of Axarquía. For lack of sufficient land and above all water resources, expansion is reportedly only approximately 150 ha per year in this zone. This situation could change in the medium term, since the sector professionals have developed and are ready to finance a large-scale project that would

double the cultivation area, using some of the water lost from the Rio Guadiaro. However, this project remains in political limbo, despite its economic and social advantages.

Hence other cultivation zones are currently expanding, in some cases at a fast tempo. Growth is reported to be around 300 to 400 ha per year in the River Guadiaro valley. Similarly, there are large projects under development in the zone between Huelva and the Portuguese border (+ 200 to 300 ha per year). Finally, a large number of small-sized facilities are being set up in the Valencian Community, in particular in the provinces of Alicante and Valencia (+ 150 ha per year). These zones have

generally more abundant water and land resources, especially thanks to conversion from less profitable crops such as citrus. In some cases, they also are under sometimes borderline conditions in terms of climate, which is windier and more frost-prone. Time will tell as to the real potential of these new cultivation zones.

### Growth in world production from all sides

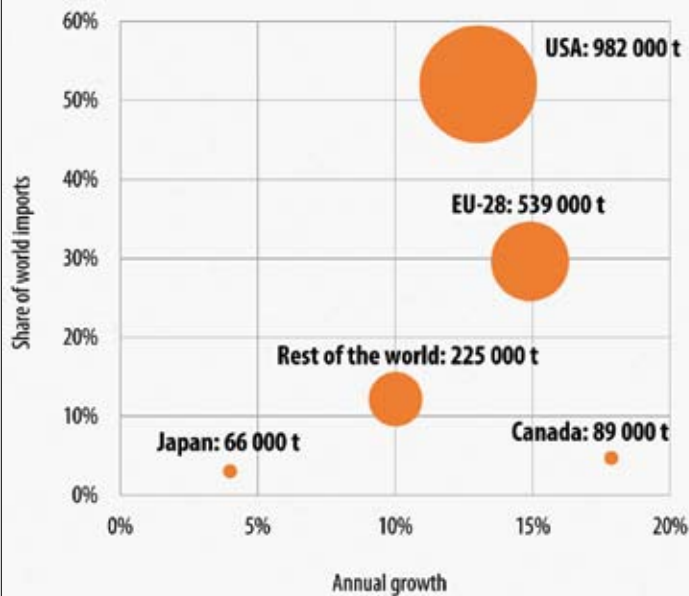
The analysis

presented in this article has shown that during the winter season too, the supply to the world market should become very significantly stronger. On the one hand, new giants are emerging. Professionals from Colombia and Jalisco within a few years have been able to build industries on the strength of a cultivation area comprising nearly 20,000 ha or more, and set to feature very prominently among the world's top exporters.

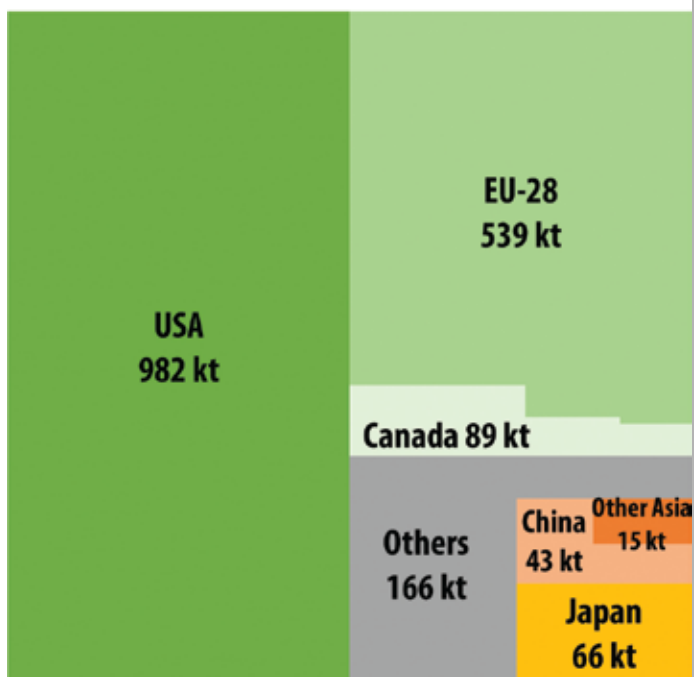
Furthermore, traditional market suppliers too have all seen renewed growth. Barring the exceptional case of Michoacán, which everyone could see coming given the extraordinary proportions of its industry and its growth, all the market suppliers appear to have fairly clear dynamics (more than 500 ha per year, even among the Mediterranean suppliers).

Finally, emerging industries are progressing not only in Portugal, but also in Ecuador or Guatemala. According to our projections, which cover producer countries supplying the counter-season market, the dynamic for which was presented in *FruiTrop* edition 256 (May 2018), the Hass world production

**Avocado - Size and growth of major world markets**  
(2017-18 imports and growth last 4 years average / source: CIRAD)



**The avocado, a world market of 1 900 000 t (2017-18)**  
(Customs sources)



**Avocado – Estimated average annual growth of the world production**

	Surface areas (ha)	Annual growth (ha/year)	Average yield (t/ha)	Production growth (t/year)
<b>Total</b>	<b>337 050</b>	<b>20 725</b>	<b>11.1</b>	<b>229 065</b>
<b>Winter season suppliers</b>	<b>266 500</b>	<b>16 300</b>	<b>10.6</b>	<b>171 975</b>
<b>Latin America</b>	<b>224 800</b>	<b>14 000</b>	<b>10.7</b>	<b>149 800</b>
Michoacán	158 800			
Jalisco	21 000			
Chile	30 000			
Colombia	15 000			
<b>Mediterranean</b>	<b>29 800</b>	<b>1 750</b>	<b>10</b>	<b>17 500</b>
Spain	13 500			
Israel	9 200			
Morocco	6 000			
Portugal	1 100			
<b>Others</b>	<b>11 900</b>	<b>550</b>	<b>8.5</b>	<b>4 675</b>
New Zealand	3 800			
Australia	8 100			
<b>Summer season suppliers</b>	<b>70 550</b>	<b>4 425</b>	<b>12.9</b>	<b>57 090</b>
<b>Latin America</b>	<b>27 500</b>	<b>2 675</b>	<b>15</b>	<b>40 125</b>
Peru	26 000			
Brazil	1 500			
<b>Africa</b>	<b>22 450</b>	<b>1 900</b>	<b>9.6</b>	<b>18 240</b>
Southern Africa	17 500			
Kenya*	4 000			
Tanzania	950			
<b>Others</b>	<b>20 600</b>	<b>-150</b>	<b>8.5</b>	<b>-1 275</b>
California				

\* Estimated surface areas based on exported volumes / Professional sources, official services

growth rate should be around 220,000 to 230,000 tons per year over the next five years.

### A tight balance, which could quickly become precarious

As high as it may be, this rate remains exactly compatible with the hypothesis of worldwide growth in demand maintaining its current footing, i.e. 13 percent per year (the four-year average). Nonetheless, it must be highlighted that the world market is currently relying on just two mainstays, namely North America (USA and Canada) and the European Union. They have taken in 95 percent of the growth in world production over recent campaigns. Yet given the already high consumption levels reached in certain countries, threshold effects are bound to appear in the medium term. In Europe, the case of Scandinavia, which has

been stagnant for several years, is symptomatic, whereas in the USA, growth is slowing down in California.

### Asia – big markets, but for the future

Well yes, the world is no longer limited to Europe and the United States. While growth reserves for the local markets in producer countries have already been largely tapped with success, Asia represents enormous potential that is barely starting to be unearthed. However, export figures show that this rich vein is only very gradually revealing itself, and that it is hard to exploit, both because of its distance from the world's main production centres and the difficulty in introducing what is often an alien product. Besides Japan, which is no longer on the rise, the countries in this region absorbed approximately

60,000 tons in 2017-18, i.e. barely more than 3 percent of world trade. Furthermore, supplier countries with a small presence in Europe or the USA, such as New Zealand and Australia, also have ambitions on these markets, for which they have an obvious logistical asset. Nonetheless, this potential competition is for the future rather than tomorrow, given the still relatively limited size of these countries' cultivation areas (approximately 3,800 ha in New Zealand and 8,100 ha in Australia).

### Promotion and prudence must remain the watchwords

Until the growth relays in Asia really get going, it would seem important to further step up the promotion actions, in order to make the most of the growth margins still available in the USA or EU. There are big margins, whether on under-consuming markets such as Germany, or others which are already big consumers but still far from maturity, such as France or the United Kingdom. The WAO's resources for stimulating the European market are still far too limited, as is attested by a budget approximately 20 times smaller than the Hass Avocado Board's (USA), for a population 1.5 times bigger. A parafiscal tax of a few eurocents per box earmarked for promotions seems more than ever like a good investment against any turnarounds in the market. It also appears clear that the "demand" dimension must now be much better incorporated into investment projects in new plantations. The current expansion rate of the cultivation area, of approximately 20,000 ha per year according to our estimates, seems to be a sound upper limit for the time being. 🍷