

# Avocado from Peru

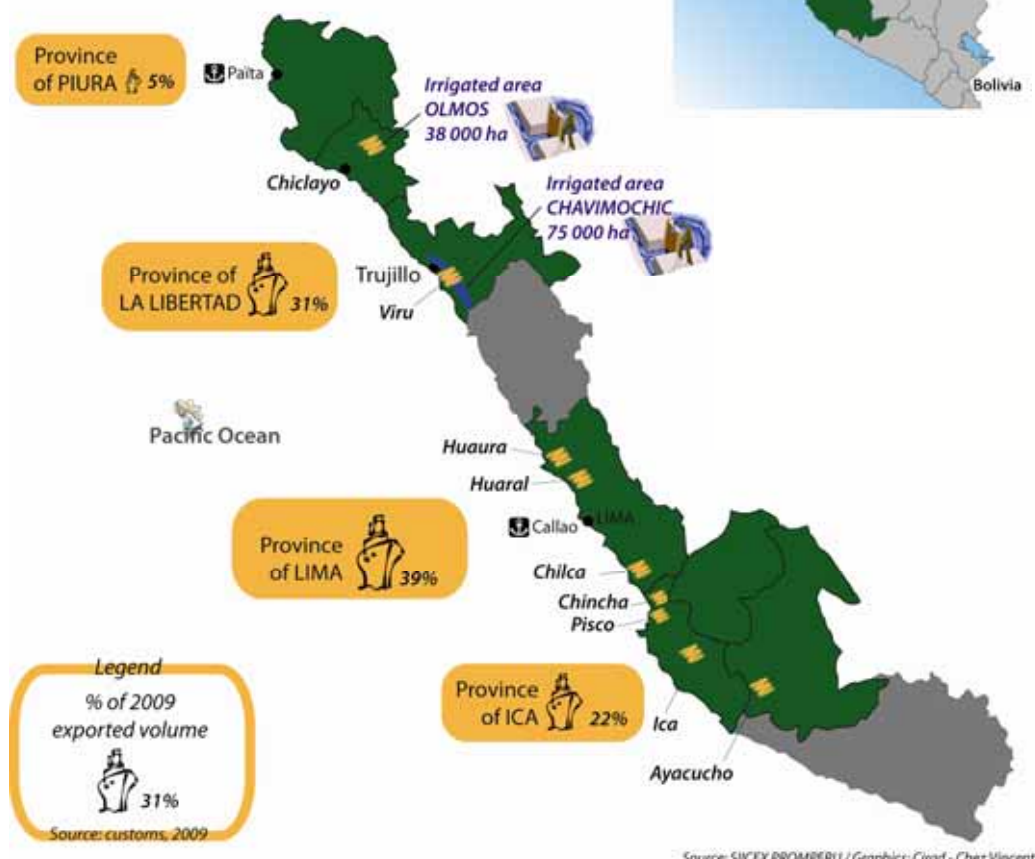
## Assets and ambitions

### Making the desert bloom

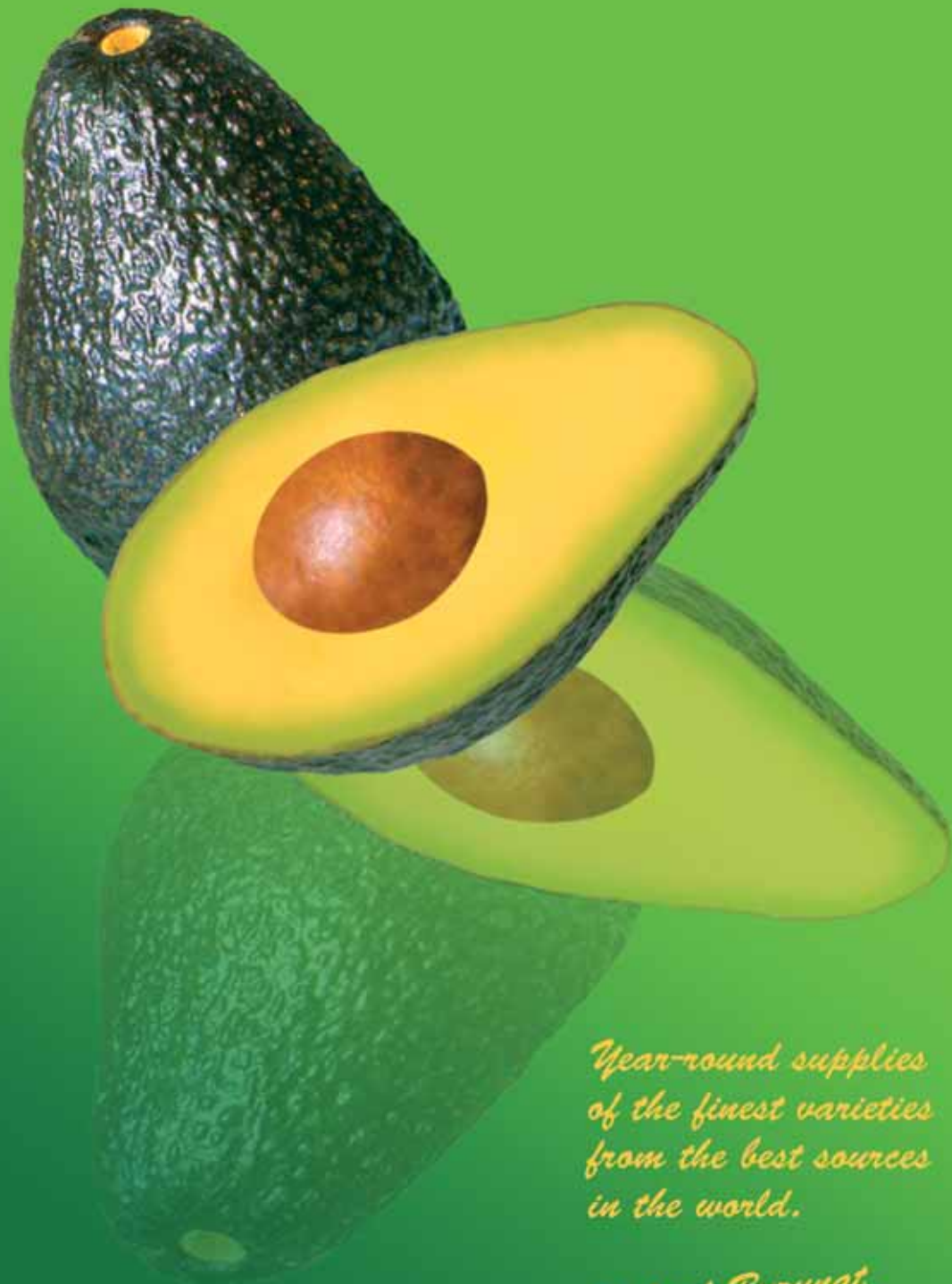
In less than a decade, Peru has become the world's third largest avocado exporter and the leading counter-season supplier of the European market. And the average of 50 000 to 55 000 t exported in recent years is only a beginning: the orchards that are not yet fruiting and planting in progress will make it possible to double the export potential in the medium term. FruiTrop reviews this unusual supplier country that possesses substantial assets and where much hard work is being done to increase market shares in both Europe and the United States.

Impressive. This is the first word that comes to mind when seeking a description of the Peruvian avocado industry. Impressive first of all as regards the production conditions that at first sight seem unpromising for an exotic fruit. Although it is in the tropics, the corridor some 2 500 km long running between the cold Humboldt current and the Andes has a desert climate and this is where practically all the fruits are grown. However, although there is practically no rain, relative humidity and temperature are ideal, with no risk of frosts or heat waves.

In addition, irrigation is possible as good quality water is available thanks to the rivers—often underground—that flow from the Andes. Avocado is thus grown under practically hydroponic conditions in large irrigated perimeters such as Chevimochic in Libertad province in northern Peru and in the valleys to the north and south of Lima.



# AVOCADO AT ITS BEST AVOCADO AT ITS BEST



*Year-round supplies  
of the finest varieties  
from the best sources  
in the world.*

*Gabriel Burunat*



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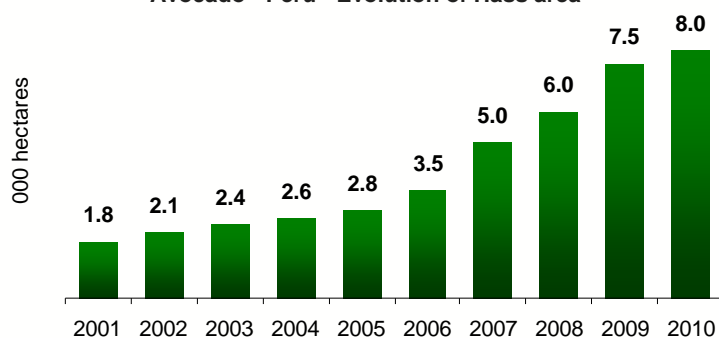
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## The ProHass growers association

With 72 members, the ProHass association groups most of the large 'Hass' avocado producers in Peru and represents some 80 to 85% of the volumes exported. The objectives set by the board of directors chaired by Enrique Camet consist of providing technical support for the sector both at the production stage and in sales (technology transfer, economies of scale, research) and strengthening the international presence of Peruvian 'Hass' avocados (promotion and access to new markets). Led by its CEO Arturo Medina, the association has gained access to the US market in 2010 after Argentina, Chile and Canada. The promotion operations conducted since 2009 are funded by the association itself from a levy of USD0.03 per kg produced and USD50 per planted hectare not yet in production.



Avocado - Peru - Evolution of Hass area



Source : PROHASS

Avocado — Peru — Main producers

Firm	Planted area	Town	Province
Camposol	2 500 ha	Viru	La libertad
Grupo Rocio	600 ha	Viru	La Libertad
Cerro prieto	540 ha	Zaña, Jequettepeque	Lambayeque
Agricola Las Lomas de Chilca	500 ha	Chilca, Ayacucho, etc.	Lima, Ayacucho, etc.
Agricola Hoja Redonda	300 ha	Chincha	Ica
Agricola Casa Blanca	230 ha	Chincha	Ica

Source: ProHass

## Low production costs and high yields

The competitiveness of these fruits is also impressive. First, plant nutrition is strictly controlled in this farming system and yields are extremely high, averaging 18 to 20 tonnes per ha in the orchards belonging to the large Peruvian operators who handle the greater proportion of the planted area. In comparison, productivity in Mexico, the world's leading production source, is some 10 t per ha. Second, the favourable climatic features also give excellent yields at packing, generally in excess of 90%. Finally, production costs are usually low. Although fertiliser and pesticides are generally imported and costly, water is cheap and of good quality and labour is extremely cheap. The average farm salary is less than USD300 per month and this considerably reduces the cost of establishing plantations (seedlings cost no more than USD5.00) and also those of operation and packing. Together with the high yields, this aspect means that the source has very substantial advantages.

## Rocketing production since the end of the 1990s

It is not surprising that production of avocados for export has also displayed impressive dynamics. Although avocado has been grown in Peru for a long time, the development of the 'Hass' variety is very recent. Previously, only local cultivars such as 'Topa Topa' or Creole varieties were grown in hot areas in the foothills of the Andes and in the Amazonian region in the eastern part of the country. Started practically from scratch in the mid-1990s and after tremendous expansion in recent years, Peruvian plantations of 'Hass' total 7 500 ha in 2010. Production is between 60 000 and 65 000 t.

It is true that most sector stakeholders are groups with sufficient resources for large-scale operations. Camposol, an agroindustry company with Norwegian and Peruvian capital, is the sector leader and has planted more than 2 500 ha since the beginning of the 2000s. Other large local groups whose core activities are banking or construction have also planted massively: Agrícola Hoja Redonda with 340 ha, Agrícola Las Lomas de Chilca with 500 ha, etc. Avocado, known locally as 'palta' as everywhere in the Southern Cone, alongside other export crops such as asparagus and coffee, has become one of the driving forces of the economy. This sector comes after the powerful mining industry—Peru is one of the main producers of gold, copper and silver—after fishing. More





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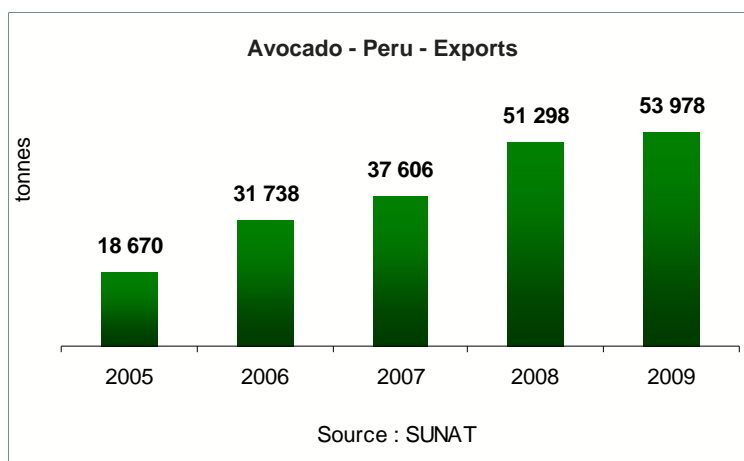
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Avocado orchards  
in the Viru region  
in Peru



Avocado — Peru — Exports					
Tonnes	2005	2006	2007	2008	2009
<b>EU, incl.</b>	<b>18 380</b>	<b>30 521</b>	<b>36 129</b>	<b>49 832</b>	<b>51 722</b>
Netherlands	5 601	8 011	14 430	23 106	26 980
Spain	6 111	12 291	12 362	17 669	15 221
UK	3 378	4 757	5 899	4 953	4 572
France	2 934	4 962	3 058	3 957	4 643
<b>North America</b>	<b>224</b>	<b>1 035</b>	<b>807</b>	<b>1 013</b>	<b>1 607</b>
Chile	-	102	400	453	507
Others	67	80	271	-	448
<b>Total</b>	<b>18 670</b>	<b>31 738</b>	<b>37 606</b>	<b>51 298</b>	<b>53 978</b>

Source: SUNAT

generally, export farming is playing a growing economic role in some formerly underprivileged regions of the country where precariousness and unemployment were the rule. In addition to providing jobs, some of the companies in the sector have also contributed to improving health care and education via their social programmes.

## One of the pillars of Peruvian agricultural exports

Of course, this development has not gone unnoticed on the international scene. In less than a decade, Peru has become the third largest avocado exporter in the world, with shipments increasing from 2 000 t at the beginning of the century to some 50 000 to 55 000 t in 2008 and 2009. In the latter year, Peru also became the largest supplier of counter-season avocado to the European market, sliding ahead of South Africa, the historic leader.

## Which are tomorrow's markets? A giant challenge is approaching

So is everything wonderful? The answer is no. First, demand on the European market, the outlet for practically the entire Peruvian avocado crop, is beginning to show signs of inadequacy. Although average season prices are still satisfactory, some periods such as June have become very risky. In 2009, simultaneous Peruvian and South African production peaks sent prices down to some EUR3.50 to 4.50 per box. Furthermore, production growth is far from over. A large proportion of areas planted in recent years is not yet in production. Thus the giant producer Camposol should triple its exportable volume by 2015. Likewise, even though some companies seem to be more cautious with regard to avocado and are diversify-

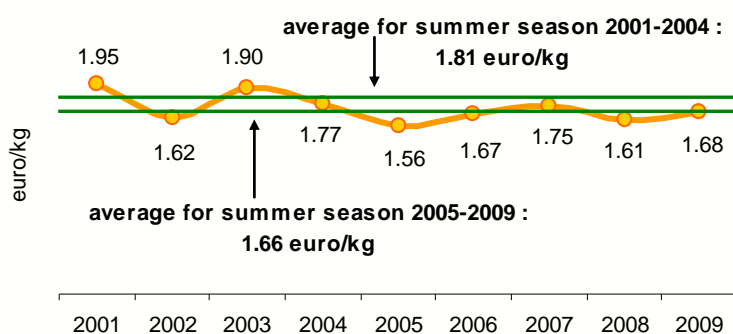


Avocado flowers

Photos © Eric Imbert

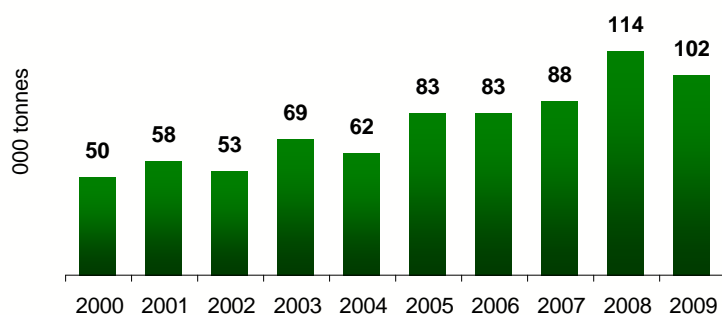


Avocado - France - Average import price - Summer season



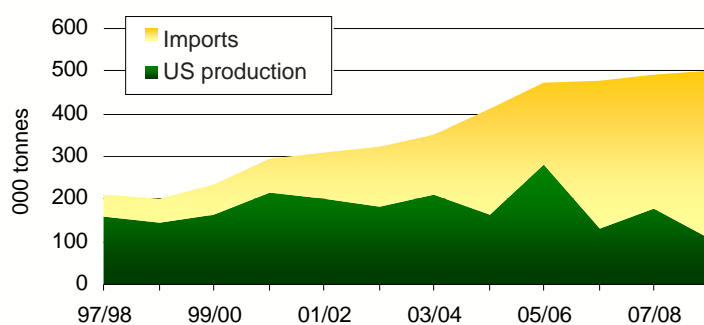
Source: CIRAD

Counter season avocado - European Union  
Evolution of supply



Source : EUROSTAT

Avocado - United States - Evolution of consumption



Sources: national customs, CAC

ing—especially into easy peelers—the area under avocado is still increasing. Several agro-industry companies have expressed a wish to invest in the Olmos 48 000-ha irrigated perimeter east of Chiclayo in the north of the country. Others have already begun development in the Ayacucho region where highland plantations at between 800 and 2 200 m mean that the production calendar is earlier than in the rest of the country (packing starting in mid-January). Peruvian 'Hass' export potential should therefore exceed 100 000 t in the short term. This is the present size of the European counter-season market for all suppliers. Peruvian exporters must therefore develop their market very rapidly. ProHass, the Peruvian avocado producers' association, has made this a priority. It is focusing efforts on the only two large markets for avocado in the world—Western Europe and the United States—that alone account for nearly 85% of international trade.

## The United States, a high-potential priority

Today, Peruvian avocados are not sold in the USA, which is much more than just a diversification market. First, imports display a growth trend that is unique in the world, increasing from less than 100 000 t at the beginning of the 2000s to more than 370 000 t in 2008-09. Prices are also very profitable. Finally, the nearby US market is more natural for Peruvian exporters than the distant European Union as logistic costs are lower and shorter delivery times improve market visibility and reduce trade risks.

In January 2010, after years of effort, ProHass succeeded in securing the opening of the US frontier hitherto closed to Peruvian avocado because of the presence of several types of fruit fly. However, the sanitary protocol requiring disinsection is still very limiting. Methyl bromide treatment, one of the two technical solutions proposed by APHIS, cannot be used as the effect on fruit quality is too great (skin burns and shorter shelf life). So cold treatment is the only alternative. But tropical fruits have poor resistance to the low temperatures required by these procedures. Exporters are currently working with physiologists on the pre-conditioning of fruits at 5 to 6°C for several days so that they can withstand two weeks of quarantines at 1°C without damage. Small-scale trials are in progress as exporters are strongly aware of the importance of not harming their image during this start-up phase. However, the quantities exported should be minimal this year, especially as not all exporters possess treatment facilities





or are not yet ready to take the financial risk of these trials.

## Other much less stringent solutions are being examined

ProHass is also working along other lines that would make it possible to avoid the considerable constraint of disinsection. A study has been commissioned in relation with the Peruvian sanitary control service (SENASA) and APHIS in the United States to show that Peruvian 'Hass' is not a host for fruit fly. If this is found to be so and recognised as such by APHIS, the gates to the US market will open wide. This could be the case from the next season onwards.

## 'Avocados: Nature's Alternative'

This is the slogan used in the promotion campaign launched in Europe in mid-June for Peruvian 'Hass' avocados. The positive health aspects of the fruit are highlighted, and especially the high vitamin and mineral contents. ProHass is funding these operations entirely and has chosen to continue the efforts on promotion started in the United Kingdom in 2009 and focus on a new target, France. In practice, the campaign is based on tastings and promotion operations in retail outlets (recipes and health features) and sports clubs in the UK. The British public will also have a chance of winning a trip to Peru, thanks to entry forms distributed with the fruits. Awareness is to be enhanced among professionals as well, especially at Rungis wholesale market in France. A web site in French and English is now on line: [www.deliciousavocados.com](http://www.deliciousavocados.com)

These operations are handled by the BokooPlus agency in France and by RED Communications in the United Kingdom.

## The eradication programme in danger

Eradication of fruit fly is another approach and far from impossible. One of the SENASA officials in charge of the dossier stated recently that in 15 years Peru could be free of fruit fly from Tacna in the far south to Tumbes right in the north. First, the coastal strip consists mainly of desert zones and fruit and vegetables for export are grown there. This means that the zones to be treated are separate from each other and also smaller than might appear. Second, the SIT (sterile insect technique) using the release of sterile males has already proved its effectiveness. Eradication has been successful in northern Chile (Arica) and in southern Peru (Tacna and Moquegua). Although such programmes have a high cost, this is outweighed by the returns on the investment generated by the opening up of new markets. Furthermore, the stakes are not only economic but also social (jobs created in severely underprivileged areas) and environmental (reduction of pesticide spraying). It thus appears that continuing the fruit fly eradication programme in the other parts of the country is a clear priority. However, the global economic downturn has led the Peruvian government to apply serious cuts to the SENASA budget, calling the programme into question. One can rightly question the coherence of government policy as on the one hand thousands of millions of dollars are invested in creating irrigated perimeters (this is the scale of the cost of infrastructure developed at Chevimochic and Olmos) to develop export agriculture that is to be an economic and social driving force and on the other operators have just been cut off from their market.

**L'avocat :  
une alternative  
naturelle**

**L'avocat Hass est une  
délicieuse source naturelle  
de vitamines E, B6 et B5**

Riche en fibres, l'avocat contient des  
graisses mono-insaturées ou "bonnes graisses"

**ProHass pérou  
avocats**

Pour de plus amples informations,  
visitez [www.delicieuxavocats.fr](http://www.delicieuxavocats.fr)

Informations nutritionnelles pour 100g d'avocat Hass (Hass) : 1,60 mg (30% ARI)  
vitamine E 0,34 mg (20% ARI) et vitamines B6 1,02 mg (20% ARI)  
Source: The Composition of Foods, 6th edition, adapted, par McCance et Widdowson

Photos © Eric Imbert



## Another major approach: increasing consumption in the EU

Developing consumption on the EU market is the other priority for Peruvian professionals. There is considerable room for improvement as annual average consumption in the western European countries with large GNPs is about 500 g—a third of that of the United States. Strongly populated countries like Germany and Italy are still avocado consumption deserts with consumption at less than 200 g per person per year.

ProHass has thus decided to devote a budget of some USD300 000 in 2010 to continue its promotion of avocado on the British market and, for the first time, to extend promotion to France. Operations consist of both a media campaign and point of sale demonstrations and will run from mid-June to the end of August (see box). The targeting seems excellent. Consumption in the United Kingdom is still moderate at about 600 g per person per year with the best growth dynamics of the EU. There is as much scope for growth in France, one of the main EU consumer countries along with Scandinavia. Avocado is well known there but little promoted, especially in the summer (see graph). In addition, the replacement of green varieties that are still very present by 'Hass' also forms substantial development potential.

## And when will there be grouped promotion operations?

Unity is strength, especially in marketing. Production is increasing and Peruvian exporters need powerful development programmes. They are not the only ones. Production is also climbing steeply in Chile. In the Mediterranean region, planting has been massive in Israel in recent years and Morocco is beginning to



Avocado — European Union — Counter season market supply

Tonnes	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
South Africa	38 205	38 908	36 266	36 404	29 872	46 955	35 934	37 944	50 451	38 345
Peru	1 299	2 849	4 401	11 266	14 590	18 096	30 508	35 857	49 829	45 777
Kenya	10 294	15 600	11 523	19 828	16 236	15 458	13 641	11 999	11 841	15 015
Argentina	58	326	440	460	709	1 224	1 804	1 709	863	1 984
Swaziland	104	112	235	411	252	352	395	178	530	313
Zimbabwe	137	285	207	739	404	599	260	323	128	115
<b>Total</b>	<b>50 098</b>	<b>58 080</b>	<b>53 073</b>	<b>69 108</b>	<b>62 063</b>	<b>82 684</b>	<b>82 542</b>	<b>88 010</b>	<b>113 642</b>	<b>101 549</b>

Source: EUROSTAT



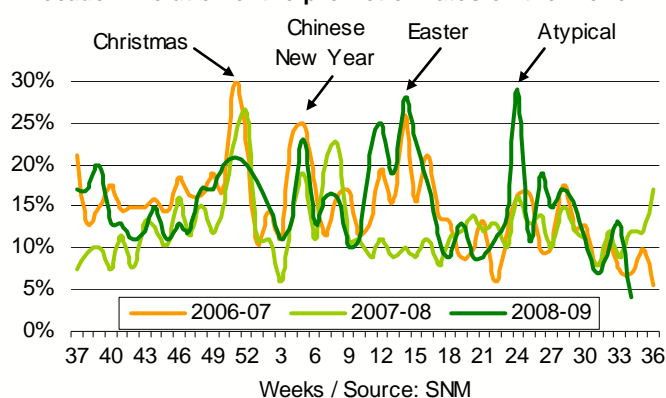
emerge. Finally, new challenges are appearing, such as Colombia. Even if the United States is opening the border, exporters in Peru and other sources will need increased sales in Europe, the only market capable of taking large volumes.

The system set up in the United States by Californian producers and Mexican, Chilean and Dominican exporters is exemplary. The substantial budget raised by a special tax levied on each box of fruit sold in the country made it possible to develop a joint tool for managing volumes and to run powerful, regular advertising that is both generic and specific to

## The French market

Avocado is the subject of impulse buying. Promotion operations thus play a key role in sales dynamics. Large distributors concentrate on avocado during three main periods: Christmas (as for all exotic fruits), Easter and November (with the switch to the 'winter range' and various supermarket theme periods and anniversaries). Sales operations with batches at an attractive price (3 fruits for EUR 1.50 for example) result in the shifting of large quantities. The French market responds well to these marketing operations and sizeable quantities are sold in years of large production. The range available in supermarkets generally consists of loose avocados (mainly sizes 16 or 18 depending on the region) and a fairly recently introduced low-price pack (a net of three or four size 20, 22 or 24 fruits). An increasing number of retailers supply ripe avocados, generally available in pairs in rigid transparent plastic packaging.

**Avocado - Evolution of the promotion rates on the French**



Weeks / Source: SNM

Photos © Eric Imbert

## The British market

The British market displays a clear preference for 'Hass', with this variety forming about threequarters of the volumes sold. The percentage is even higher at 85% in supermarkets, which sell by far the largest proportion of fresh fruits ('Hass' is the only variety accepted by some chains). The smooth varieties go mainly to wholesalers and the catering industry, but these nonetheless also favour 'Hass'.

Supplies are markedly segmented in supermarkets. There can be two references for loose fruits: large (especially sizes 14 and 16) and medium, forming the heart of the range (mainly sizes 18 to 22). Packages of 'baby' avocados (mainly sizes 22 to 26) are always on display as a traffic builder. The great majority of the avocados sold in supermarkets are 'ready to eat' or have at least spent time in a ripening facility (for eating within 3 or 4 days). There are also 'twin packs' consisting of one fruit ready to eat and the second for eating fairly soon.

The consumption calendar differs from those of the other EU countries. More fruits are sold in spring and summer than during the rest of the year (the result of the South African promotion operation). Another original feature of the market is that a large proportion of the purchases by supermarket chains are the subject of contracts with suppliers that can cover as much as the entire season.

each source—a proportion of the budget is allocated to each supplier country so that it can focus on its own themes. The results speak for themselves as consumption has been multiplied by two and half in ten years. Peruvian exporters will have to find solutions for the sale of a strongly increasing export potential in the coming years and must play a leading role in the setting up of such a structure, working with South Africa, to achieve larger sales on the European counter-season market. The existence of a professional organisation in each of these countries (ProHass and SAGAA) and experience in promotion operations are assets. A first step before setting up a European Avocado Board grouping all the stakeholders working in this market! ■

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