

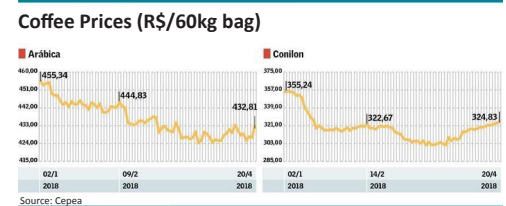
# CONFIDENTIAL

**YOUR BEST SOURCE OF INFORMATION ABOUT THE BRAZILIAN COFFEE BUSINESS. THIS ISSUE:**

- THE SIZE OF THE BRAZILIAN CROP (PAGE 3)
- SEPARATING RIPE CHERRIES: MECHANICAL SIPHONS ARE ESSENTIAL TO PRODUCE HIGH QUALITY NATURALS... AND WASHED COFFEES TOO (PAGE 4)

## ☪ BRAZIL SUPER-CROPS AT RISK, PRESENT AND FUTURE?

Although weather conditions are favorable, the coffee harvest should not reach its productive potential for a year of positive biennial cycle in Brazil due to the lack of rains during the flowering period in some regions. The latest crop projections estimate a 2018 output between 54.4 and 58.5 million coffee bags. The current price scenario displeases growers and curbs planting and production growth but favors the industry that expects a well-supplied market. Brazilian coffee shipments have increased only 1.1% per year from 2008 to 2017; if we consider exports of Arabica – which had the best performance – the growth rate was 1.4% per year and 0.6% per year below the world average.



Sources: Valor Econômico and Revista do Café

## ☪ CONAB TO UPDATE DATA ABOUT PRIVATE STOCKS

The agency of the Ministry of Agriculture in charge of warehousing and crop estimates (CONAB) is updating information on the main private coffee warehouses located in Minas Gerais and Espírito Santo states. Data such as reception and dispatch capacity, the equipment used in the warehouses, registration in the National System of Storage Units (Sicarm) will be verified. As part of this process, each warehouse will be advised of the importance of participating in surveys held annually regarding private stocks since they contribute to governmental planning towards agricultural production. CONAB's data collection began in April and is expected to be concluded by the end of June 2018.

Source: Revista Globo Rural

## ☪ NUMBER OF JOBS GOES DOWN WHILE SALARIES GROW IN THE COUNTRYSIDE

A recent study conducted by the FGV business school shows that the Brazilian agribusiness has been employing fewer people over recent years due to the incorporation of technologies that have positively impacted productivity. Although an inevitable trend, it is not necessarily bad since it has caused informality to go down while leading average salaries to go up in the sector because low-paying jobs have been eliminated. The population employed by the agribusiness totaled 18 million people in 2017 or 19.6% of all the workforce employed in Brazil, a decrease of 1.9% per year in the last 5 years. Analysts note that part of the workers dismissed have found opportunities in the services sector. Informality in the agribusiness has dropped 3.4% per year from 2012 to 2017, while in the rest of the economy the decrease was only 0.7% per year. There has also been a strong increase in the average profit of agricultural and livestock activities of 9.2% per year between 2012 and 2017, according to the study.

Source: Valor Econômico

## ☪ THE FUTURE OF BRAZILIAN AGRICULTURE: NEW STUDY BY EMBRAPA

Embrapa has released the document Vision 2030: the Future of Brazilian Agriculture as part of the commemorations of the institution's 45th anniversary. The study comes out after 18 months of work by 370 collaborators as part of an effort by Embrapa to reinvent itself by rationalizing costs, becoming more agile and structuring a private arm to address new trends and challenges and to strengthen scientific research. Demands such as digital transformation, new consumption habits and advances in gastronomy are impacting the way Embrapa works. The estate-owned institution is also changing to handle projections of increased global water consumption (50%), energy (40%) and food (35%) until 2030, specially in Latin America, Asia and Africa. In the face of higher natural resource limitations and mounting environmental restrictions, Embrapa warns that it will be necessary to accelerate efforts to increase production while preserving the sustainability of the supply chains, and predicts the expansion of systems that integrate agriculture-livestock-forests, the recovery of

degraded pasture lands and the optimization of irrigation. If the global production of food grows 20% over the next decade, the Brazilian supply will have to grow 40% for that to become a reality. This is yet another reason for Embrapa to continue its relevant work.

Sources: Valor Econômico and Embrapa

### ☉ COFFEE CONSUMPTION KEEPS GROWING IN BRAZIL

Coffee consumption at home has increased 3.9% in volume and 10% in value in Brazil in 2017 compared to the previous year; out of home consumption increased 2.7% in volume and 21% in value. Recent surveys show that only 40% of the Brazilian population has the habit of drinking coffee outside home which is low compared to other large consuming countries and shows a potential for even more growth in this segment.

Source: Valor Econômico

### ☉ 3 CORAÇÕES EXPANDS BEVERAGE PORTFOLIO

3 Corações net revenues have increased 20%, from R\$ 3.1 bi (US\$ 870.7 mi) to R\$ 3.7 bi (US\$ 1.04 bi) in 2017 in all segments. Sales of capsules, that were expected to grow 10%, had an impressive 34% increase in 2017. The company's capsule unit, located in Montes Claros, Minas Gerais state, is about to invest R\$ 20 mi (US\$ 5.6 mi) to double its production capacity to 20 million capsules per month. In another front, the company's brand TRES, of espresso coffee and multi-drink single-serve machines, has launched a limited edition espresso to celebrate the 2018 World Cup. The new product adds to the brand's portfolio that now totals 22 coffee, cappuccino and tea beverages.

Sources: Valor Econômico and Uol

### ☉ SPECIALTY COFFEES FROM BRAZIL ENTERING CHINESE MARKETS

The Minas Gerais government has initiated a series of actions to expand the presence of the state's specialty coffees in China. Fifty samples of roasted specialty coffee grown according to the Certifica Minas Café sustainability program have been sent to Huixin Management, a group that owns upscale coffee stores in several parts of the world. The samples will be evaluated by a supermarket chain, potential buyer of the coffees. Data from Minas Gerais Secretariat of Agriculture show that the state's exports of green coffee to China grew 23% in volume and 15% in value in 2017 in relation to 2016.

Source: Revista Cafeicultura

### ☉ BRAZILIAN COFFEE BRANDS EXPAND ABROAD

Coffee shop franchises are expanding with consumers appreciating new preparation methods and learning more about Brazilian origins. A company from São Lourenço, a coffee and touristic town in Minas Gerais, plans to open 45 stores in 2018 plus one operation in Lisbon, Portugal. Another company, located in the metropolitan area of Vitória, capital of Espírito Santo state, sells "coffee cream" in glass jars in 47 microfranchises in 13 states and has signed a contract to distribute its product in China, South Korea and Japan.

Source: Valor Econômico

### ☉ ILLY EXPECTS TO REPEAT GROWTH IN BRAZIL IN 2018

After a 14% increase in revenues and 18% growth in volume of coffee sold in Brazil in 2017 despite the slow economy recovery, Italian illycaffè expects to repeat the performance this year. The company has strengthened its B2B and e-commerce businesses in the country that also happens to be illy's main supplier of green coffee. Around 50% of the illy blend comes from Brazil, especially Minas Gerais, with the remainder 50% coming from 19 Central American and African countries. The company closely follows the development of each coffee crop in Brazil given the country's importance for illy's operation.

Source: Valor Econômico

## Brazilian Prices

Main Producing Regions / Farm Gate

April 30, 2018

Arabica Naturals (R\$/ 60 kg bag)		Conilon / Robusta (R\$/ 60 kg bag)	
Cerrado MG	435,00 ↑	Colatina-ES fair average price	331,00 ↑
Mogiana	430,00 ↑		
South Minas	430,00 ↑		
Arabica Pulped Naturals (R\$/ 60 kg bag)		BM&F (US\$/60kg Arabica bag)	
Cerrado MG	455,00 ↑	Sep 2018	150,85 ↑
South Minas	450,00 ↑	Dec 2018	152,60 ↑
		Mar 2019	158,55 ↑
		Real R\$ / Dolar US\$	
		Apr 30, 2018	3,50 ↑

+ 5.8%

Source: [www.qualificafex.com.br](http://www.qualificafex.com.br)

## THE SIZE OF THE BRAZILIAN CROP

Long questioned and challenged, the numbers of the Brazilian crop published by CONAB, the agency of the Ministry of Agriculture's (MAPA) responsible for warehousing and crop estimates, along with other estimates were the subject of a day-long workshop organized by the National Coffee Council (CNC). The event was attended by the chairpersons or chief executives of all sectors in the Brazilian coffee business and government – growers (CNC and CNA), trade (CeCafé), roasting and soluble industries (ABIC and ABICS) and MAPA's Coffee Department – besides CONAB staff, cooperatives and representatives of other ministries. The keynote speakers were the Executive Director of the International Coffee Organization (ICO), José Sette, CONAB's Agribusiness Information Chief Aroldo Antonio de Oliveira Neto and ABIC's Executive Director Nathan Herszkowicz. All stakeholders represented at the event were invited to comment on the keynote speeches as part of the program.

CONAB presentations in the morning session showed the high standards used by the agency to estimate Brazilian production, from the sampling of growers to be visited to the statistical and consolidation procedures used. The need for more funding to improve the quality of the sample and its integration with the agency's georeferencing and satellite imaging whose use has to be enlarged were mentioned. CONAB recognizes that the weakest point in its current coffee-related work is the estimation of inventories in the hands of the private sector, which is based on questionnaires filled out by the stockholders themselves. More reliable stock figures may lead to better consolidation of all figures – production, exports, domestic consumption and stocks – and in turn lead to a healthy internal questioning of production figures before they are officially released.

ABIC's presentation stated that the main component of its estimates of domestic consumption comes from highly reliable figures provided by member companies that account for about 80% of the coffee drunk in Brazil. The rest comes in about equal parts from former ABIC members and consumption not formally accounted for, e.g.: in coffee farms and towns or sold by small informal roasters.

The main comments in the morning addressed the problems of having two government estimates – by CONAB and IBGE –, ways to improve stock estimates, how to increase the reliability of CONAB's work, recognized by participants but questioned by many, and manners to disseminate the seriousness of the work performed.. Considering that IBGE is legally required to provide estimates of all Brazilian crops, participants recommended that CONAB and IBGE coordinate and reconcile their numbers before the respective estimates are released. Greater private participation and ways to encourage this were mentioned as necessary to improve the estimates of private stocks that are seen as critical to arrive at consistent annual coffee flow figures. Federal Deputy and President of CNC Silas Brasileiro, who presided over the meeting, stated that a bill may be proposed to make the reporting of stocks mandatory.

The afternoon keynote speech by José Sette spelled out the discrepancies in annual Brazilian coffee figures that almost always showed excess demand or lack of supply. On the positive side, this discrepancy was significantly smaller in 2016/17 after large differences registered in the two previous crop years. Whereas in the not distant past the ICO simply reported the figures provided by member countries, its Council had recently approved the adjustment of figures to arrive at consistent coffee flow figures year after year. CNC questioned whether this adjustment procedure should not be done in consultation with the respective countries rather than unilaterally by the ICO and Sette replied that this had not been possible in the time available but might be viable in the future.

Comments in the afternoon session revisited the need to allocate funds for CONAB to enhance its sound approach to crop estimates by both increasing the use of and updating its technology regarding georeferencing and satellite imagery as well as improving sampling and auditing. Discussion also took place about the need to provide resources to measure stocks in a reliable way, since this should not be an estimate but an actual count of coffee physically present in government and, especially, private warehouses. It is obvious that stocks have to be treated as an estimate now given the lack of actual figures! Finally, substantial time was devoted to the need to reconcile figures – production, exports, consumption and stocks – prior to the release of CONAB estimates, ideally with the participation of other parties in charge of estimates, e.g. IBGE and ABIC, and to make adjustments, if necessary, by all parties in order to provide consistent figures to the market and the ICO.

**\* Carlos H. J. Brando, who wrote this account, mediated the afternoon session of the Workshop. However, this is not an official report of the Workshop and though authorized by CNC it holds the views of the author who is solely responsible for its contents.**

## SEPARATING RIPE CHERRIES: MECHANICAL SIPHONS ARE ESSENTIAL TO PRODUCE HIGH QUALITY NATURALS... AND WASHED COFFEES TOO

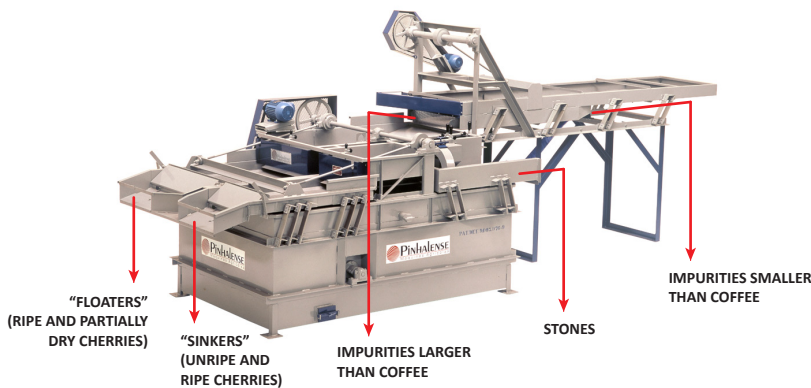
Invented and patented by Pinhalense, the LSC mechanical siphons have proven to be essential to produce high quality natural coffees, alone or combined with other Pinhalense machines depending on the type of natural to be produced and the raw material(s) available.

Traditionally used in Brazil, where naturals play a key role in coffee supply for local consumption and exports, the Pinhalense mechanical siphons have found their place in many other producing countries as the first machine in wet mills, preceding pulpers and replacing water and labor consuming siphon tanks. However, their role in the production of naturals in typical washed coffee origins has been largely ignored until recently.



Different qualities of natural coffees can be obtained from ripe, over-ripe and partially dry cherries harvested from the coffee bush. The LSC mechanical siphon is essential to separate the over-ripe and partially dry cherries that are not many at the beginning of the harvesting season but tend to increase as coffee picking progresses and the end of the season approaches.

The role of the Pinhalense mechanical siphon LSC is to separate the “floaters” from the “sinkers”, i.e., the over-ripe and partially dry cherries from those that are mostly ripe with the odd immature ones mixed depending on the quality of harvesting. As a result of this separation, the mechanical siphon makes over-ripe and partially dry cherries available for immediate drying under the sun, in mechanical driers or in a combination of these two drying systems, to produce one type of naturals. More quality conscious natural producers may wish to separate over-ripe and partially dry cherries from each other and to further process them in different ways. With Pinhalense technology, it is possible to separate these two types of cherries that are at different drying stages, have different organoleptic features and should be dried separately to produce naturals that can have different cup features.



Super-naturals is the name that specialty coffee exporter QualicafeX gives to floaters that after separation by density in the mechanical syphon are separated according to their size. The larger over-ripe cherries, mostly in the raisin stage, have body and sweetness that make them a unique ingredient for top quality espresso blends. A combination of Pinhalense machines is therefore required to produce these super-naturals: mechanical siphons and cherry graders.

To produce naturals from ripe cherries that sink in the mechanical siphon may require further separation to eliminate the unripe cherries before drying. There is much talk in the market today about using costly color sorters to perform this task but depending on the quality of harvesting, that is high in most washed coffee producing countries, this separation can be performed manually at little additional cost. Yet another possibility is to use Pinhalense high-performance unripe cherry separators and produce black honeys, dried with all mucilage attached, whose cup features will be very close if not equal to naturals in most processing environments.

The LSC mechanical siphons, that recycle all the little water that they use, offer other benefits besides cherry separation. They remove impurities smaller and larger than coffee cherries as well as stones all of which are discharged continuously and without the need for any labor. The separation of extraneous materials is critical to avoid damage to pulpers and mucilage removers that may be used in further processing and to extend their useful life. Pinhalense mechanical siphons have many advantages over conventional siphon tanks that consume a lot of water, require frequent manual discharge of stones (and floaters too, in some cases) and do not separate extraneous materials.

Pinhalense mechanical siphons LSC, available in several sizes and capacities, can be used independently from other machines, added easily to existing milling lines made by any supplier to replace conventional siphon tanks, and used as the initial machine in Pinhalense wet milling lines.