

# CONFIDENTIAL

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

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## **CLIMATIC CONDITIONS MAY AFFECT NEXT ARABICA CROP**

Coffee flowering has started early in the Brazilian Southeast due to rains that occurred in August but the current conditions of the plants are concerning experts and growers alike. Recent climatic problems have affected tree growth, with branches shorter than usual, adverse conditions to support flowering and less room for cherries to grow. This caused some growers to anticipate pruning. However, it is still too early to estimate eventual production losses in 2017 as the actual size of the Arabica crop will depend largely on rainfall patterns in coming months.

Source: Valor Econômico

## **CONILON OUTPUT IS THE LOWEST IN 12 YEARS**

Brazil's total coffee production increased and reached 49.6 million bags in 2016; Minas Gerais, the leading Arabica-coffee-growing state produced 30% more than last season. Espírito Santo, on the other hand, had an output of only 9.1 million bags, of which only 5.4 million bags are Conilon/Robusta. The Brazilian Conilon volume is the lowest registered over the past 12 years, due to an extended drought and erratic distribution of rains in the main producing coffee areas of Espírito Santo.

Sources: Folha de São Paulo and Conab

## **BRAZIL IS NEWS AT 6TH ICO FORUM ON FINANCE**

Brazil was very active in the Forum with four Brazilian panelists and issues that regarded the country. Carlos Melles compared the environment during the ICO quotas and after them and the challenges to transfer income to growers in a free-market scenario. Carlos Brando addressed challenges for and lessons from Brazil (see Outlook article). The role of pulped naturals at the New York C contract was discussed and Rodrigo Costa had the last word about the feasibility of the creation of a contract for naturals. Finally, Mauricio Ribeiro do Valle explained how Cooxupé headed in the futures market to barter members' coffee for inputs and equipment over a two to three-year payment period.

Source: P&A

## **NEW "CYCLE PRUNING" FOR ARABICA REDUCES COSTS**

The Agricultural Research and Extension Services Institute of Espírito Santo (Incapar) has extensively researched pruning techniques for Conilon/Robusta since the 1990s and today up to 98% of coffee growers use the techniques it developed. Incapar has recently decided to apply such experience to Arabica: the Scheduled Cycle Pruning for Arabica Coffee (PPCA, from its initials in Portuguese) provides average reduction in labor costs of 50% and over 28% increase in average yields, apart from being easy to implement. The technique, launched in August, consists of the removal of the bottom branches making the plant change its physiological behavior as the upper branches grow more and enable a more uniform production year in year out.

Source: CaféPoint



## **COFFEE DEPARTMENT OFFICIALLY RECREATED AT MINISTRY OF AGRICULTURE**

The Brazilian Government has published Decree No. 8852 establishing the Coffee, Sugarcane and Agroenergy Department. The new Department will coordinate coffee matters at the ministry, support the work of the existing Brazilian Coffee Policy Council (CDPC) and

supervise the operations of the Brazilian Coffee Fund (Funcafé) while strengthening the synergies between the public and private sectors.

Source: National Coffee Growers' Council (CNC)

## PRODUCTIVITY UP IN ARABICA ACCORDING TO CONAB

The average national productivity for Arabica and Conilon together is 13% higher in 2016, at 25.5 bags per hectare (1,530 kg/ha), in contrast to last year. The average yields for Arabica are up 25% with noteworthy growth in the states of São Paulo (+43.7%), Espírito Santo (+28.3%) and Minas Gerais (+25%). Conilon however has shown losses of 22% in average productivity due to droughts in the largest producing area of Espírito Santo and Bahia. Minas Gerais is the leading coffee producing state in Brazil with 28.9 million bags in 2016. The fourth and final crop estimate by the Ministry of Agriculture's agency in charge of warehousing and crop estimates (Conab) will be released in December.

Sources: Estadão Conteúdo and Globo Rural

## COFFEE PRICES GROW 37 TIMES FROM BEAN TO CAPSULE

Between the stage of green coffee (before roasting) and capsules for espresso, the price of a kilogram of coffee goes from R\$ 8,60 (US\$ 2.70) to R\$ 329 (US\$ 103) in Brazil. This value addition combined with different tax rates for different products cause tax payments to increase 97 times besides contributing to more jobs and calling for further investment in research and technology. Coffee is just an example of the importance of the industry to generate wealth. The current share of Brazil's industrial sector in the GDP is only 11.4%, a rollback to the 1940s and a huge loss to the country, has demonstrated a study carried out by the Federation of Industries of the State of São Paulo (Fiesp).

Source: FIESP

## GSB2 PROPOSES NEW PACKAGING FOR THE SPECIALTY MARKET

GSB2, P&A's associated advertising agency that specializes in coffee, has designed an innovative package for specialty roaster Unique Cafés: a transparent glass bottle for roasted beans. The container, the first of its kind, was launched during the International Coffee Week held in Belo Horizonte in September. The bottle holds 250g of a single origin coffee that cupped over 86 points (SCAA standard) and costs R\$ 90 (US\$ 28), the equivalent of R\$360 (US\$ 110) for a kilogram of roasted specialty coffee.

Sources: GSB2 and P&A



## EXPANSION OF DOLCE GUSTO FACTORY ALREADY PLANNED

Nescafé's Dolce Gusto factory – opened in Montes Claros, MG, less than one year ago with investments of R\$ 220 million (US\$ 69 million) – is already working at full capacity and plans to extend its production lines are being discussed. Dolce Gusto is growing more than 50% per year in Brazil and pushing the growth of the capsule category. According to the company, there is a plan to launch limited editions of capsules with award-winning Brazilian beans every year, similarly to what was done in 2016. All Dolce Gusto capsules made in Brazil use 100% Brazilian coffees; in the past, the products were imported from England, Spain and Germany.

Source: Valor Econômico

## Brazilian Prices

Main Producing Regions / Farm Gate

September 30, 2016

| Arabica Naturals (R\$/ 60 kg bag)        |          | Conilon / Robusta (R\$/ 60 kg bag) |          |
|--|----------|------------------------------------|----------|
| Cerrado MG                               | 535,00 ↑ | Colatina-ES fair average price     | 465,00 ↑ |
| Mogiana                                  | 530,00 ↑ |                                    |          |
| South Minas                              | 530,00 ↑ |                                    |          |
| Arabica Pulped Naturals (R\$/ 60 kg bag) |          | BM&F (US\$/60kg Arabica bag)       |          |
| Cerrado MG                               | 585,00 ↑ | Dec 2016                           | 181,40 ↑ |
| South Minas                              | 580,00 ↑ | Mar 2017                           | 185,10 ↑ |
|  |          | Sep 2017                           | 190,55 ↑ |
|  |          | Real R\$ / Dolar US\$              |          |
|  |          | Sept 30, 2016                      | 3,24 =   |

+ 10.4%

Source:

www.qualificafex.com.br

## CHALLENGES FOR AND LESSONS FROM BRAZIL\*

Brazil has been very efficient to produce coffee in the last 2 decades. Coffee production increased more than 50% in the last 15 years and Brazil's market share grew from 22 to 33%. But there are challenges to retain or increase this market share, as addressed below.

### 1. Adaptation and resilience to climate change

Climate change mitigation is required because Brazil lost 22 to 24 million bags of coffee in the last 3 years due to droughts. This is equivalent to one half of the Brazilian crop or the average Colombian and Indonesian crops together. In addition, untimely rains during the harvesting season caused quality losses in Arabica this year.

### 2. Mechanization of harvesting and other activities in mountain areas

Mechanization of mountain areas is required and calls for both equipment development and new ways to plant coffee, e.g., terracing, because labor is comparatively expensive in Brazil, salaries themselves and benefits like individual protection equipment, good working conditions and pension payments. Labor can account for 60% of direct production costs in mountain areas and only 30% in flat mechanized coffee areas.

### 3. Increase the efficiency of extension services to reach small growers and to implement good sustainable agricultural practices

To improve productivity and sustainability of small growers is critical because they are 80% of the growers and produce 35% of the crop. The islands of inefficiency in Brazil are much more associated with grower size than with geographical areas.

### 4. Greater funding for and focus in research activities

Larger resources for research are required to be used with a strong focus on climate change mitigation and mechanization of coffee planted on mountain sides, challenges 1 and 2 mentioned above.

### 5. Marketing and value addition

Last but not least, marketing and value addition have to be increased because Brazil improved both the quality and the sustainability of its coffees but prices and price premiums have not gone up accordingly.

Some if not most of these challenges are not new, and there are already success stories behind them, but the leading success stories have to do with the three "revolutions" that the Brazilian coffee business underwent: productivity, sustainability and quality.

Average **productivity** increased from 14 to 25 bags per hectare (840 to 1,500 kg/ha) in 15 years as a result of research, technology transfer and the creation of an adequate business environment: financing, efficient markets for inputs and equipment, and an efficient supply chain. Productivity grew substantially without increasing the planted area that indeed fell down.

This is **sustainability** at its best because land was not taken away from the production of food crops and animal protein. Brazil is today the largest source of sustainable coffees in the world with over 25 million bags of coffee verified or certified as sustainable and 7 million bags of sustainable coffee exported in 2015.

**Quality** comes next and last. Spurred by the specialty sector, Brazil has improved quality substantially with great increases in the production and exports of top quality specialty coffees – 6 to 8 million bags produced per year – and great advances in the field of differentiated coffees that today account for 30% of total exports.

This is topped by an efficient supply chain that transfers 85 to 90% of the FOB export price to growers.

\* Presented at Panel 1, "Tackling Challenges in Coffee Growing Countries", at the ICO's 6th Consultative Forum on Coffee Sector Finance.

## DO DENSIMETRIC TABLES REMOVE COLOR DEFECTS?

The obvious reply to this question is “no”, reason why most dry mills use color sorters to discard off-color beans. However this issue deserves a more careful analysis because the great separation power of Pinhalense MVF gravity separators allows them to separate many off-color beans that are lower density than average, for example, some black, mal-formed and fermented beans. The message here is not that one type of machine replaces the other but instead that a combination of the two types of machines is the ideal cost-benefit solution. Because the separation cost per ton of coffee – investment and operation – is much lower for MVF gravity separators than for color sorters, the best arrangement is to have enough MVFs to ensure that all color defects associated with lower density are removed by the lower cost gravity separators and do not reach the more expensive color sorters. The Pinhalense MVF line of gravity separators excels at the function described above reason why it has become the state-of-the-art machine preferred by dry coffee millers around the world.

## AND OTHER QUESTIONS...

### **Why is repassing required when a gravity separator is used?**

Because no matter how efficient the gravity separator is, there will always be a central fraction where beans of different densities and qualities are mixed. It is this mixed fraction that must be repassed in order to ensure adequate separation. Pinhalense MVF separators may be supplied with an optional built-in repasser that enables for automatic repassing in the same machine if so desired.

### **Why doesn't a size grader separate light and defective beans?**

Because a size grader works by sieving the beans in progressively smaller screens, meaning that all beans of the same sizes specified are kept together irrespectively of how sound they are. Beans with berry borer “tunnels”, hollow beans, shells or ears, some over-fermented beans and all other beans with defects that lower their density cannot be separated by sieving because they have the same size as the sound, solid beans of that same grade. However they can be separated in the MVF gravity separator with the help of flotation, that causes the “light” defective beans to “float” and the good “heavy” ones to “sink”.

### **Can the Pinhalense MVFs be used to separate stones?**

Even though Pinhalense gravity separators have been designed to separate “light” and defective coffee beans from the sound ones, they will separate stones too. In this case, they must be equipped with a lateral outlet for stones, supplied upon request. However there are specific machines – for example, the Pinhalense CPF and CPFBNR destoners – to separate stones earlier in the process flow. The MVF should only be used to separate stones that failed to be separated earlier or are found in a lot that has not been pre-cleaned and destoned for some reason.

### **Why should positive pressure gravity separators, like the Pinhalense MVF, be preferred over negative pressure machines?**

Because no matter the types of adjustments available, the suction/aspiration machines create uniform pressure over all the deck area and do not allow for air-directioning. This prevents efficient separation, that requires different pressures at the rear, center and front of the deck in order to enable product separation in layers first and separation of the different layers later. Negative pressure machines also require much more energy to operate because it is always easier to blow than to suck any grain.

### **Why to use a Pinhalense MVF gravity separator instead of similar machines available for grains?**

Because coffee is a rather uniquely shaped grain, with one flat and one curved surface. This required a special development effort from Pinhalense to adapt to coffee the standard grain separators used for beans, corn, rice, etc. Pinhalense's development produced a revolutionary deck made of perforated metal sheet (instead of wire mesh) and an innovative system to control the air layer that causes coffee flotation. As a result, the MVF offers a finer degree of separation and a greater precision of adjustment made possible by additional controls not available in conventional gravity separators.

Pinhalense offers 4 sizes of MVF densimetric separators with capacities from 1 to 7 tons of green coffee per hour. Except for the smallest MVF-0X model, all others can be supplied with optional automatic repasser, dust suction hood and electronic adjustment of the intensity of vibration.

