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

- THE PERFECT STORM IN BRAZIL AND OPPORTUNITIES FOR OTHER ORIGINS (PAGE 3)
- COMPACTA: THE NEW COMBINED HULLING UNIT (PAGE 4)

(||) SHIPMENT OF COFFEE IN BIG BAGS IN RESPONSE TO LACK OF CONTAINERS

Seeking to circumvent the acute lack of containers, Cooxupé, Brazil's largest coffee cooperative and exporter, made its first shipment of coffee big bags directly in the ship. The pandemic is one of the main factors behind the lack of containers whose flows and availability changed as lockdowns affected activities. Cooxupé revised its 2021 shipment forecast downwards by almost 20% due to logistical problems.

Source: Forbes

LOW CARBON FOOTPRINT OF ARABICA COFFEE IN BRAZIL

Embrapa Coffee and Embrapa Environment in partnership with Cooxupé studied the life cycle inventories (LCI) of the main Arabica coffee production systems in key Brazilian coffee regions: Mogiana, Cerrado and South Minas. They found out that the carbon footprint of Brazilian Arabica coffee beans ranged from 1.9 to 4.6 kg CO2 eq/kg coffee, a range that is well below the figure of 6.5 kg CO2 eq/kg coffee measured in a study in a different country. LCIs compile all inputs consumed and emissions to produce 1 kg of green coffee beans.



Source: Embrapa

(||) SENSORY EVALUATION METHODOLOGY FOR SOLUBLE COFFEE UNDER DEVELOPMENT

ABICS, the Brazilian Soluble Coffee Industry Association, is developing an innovative sensory evaluation methodology that proposes quality standards for instant coffee. The search for this methodology derives from the need to have a common protocol for sensory analysis and to establish criteria for evaluating the intrinsic and natural attributes of soluble coffee. ABICS's latest survey indicated that the consumption of soluble coffee in Brazil increased 5.4% between January and October of 2021.

Source: Notícias Agrícolas

() CONSUMPTION FALLS DUE TO HIGHER COFFEE PRICES

Domestic consumption fell 14% in October in response to high coffee prices, according to the Brazilian Coffee Roasters' Association (ABIC). Green coffee, the raw material that represents 70% of the cost for the coffee industry, rose 130% this year, the highest figure in the last 25 years. Such increase has been reflected in the recent readjustments of coffee prices to consumers.

Source: Valor Econômico

GCP BRAZIL ANNUAL MEMBER MEETING HIGHLIGHTS THE IMPORTANCE OF COLLECTIVE **ACTIONS TO EFFECTIVELY REACH COFFEE GROWERS**

Bringing together more than 45 participants from the whole coffee chain, the 5th Member Meeting of the Global Coffee Platform in Brazil was held virtually on December 2nd. GCP Brazil members shared experiences and discussed advances in sustainability and opportunities for collective actions that effectively reach the field, with positive impacts for growers and their communities. Many activities were and are being currently developed by GCP's Responsible Use of Agrochemicals initiative, for example: building warehouses for agrochemicals, training on application technology, growers' engagement on returning empty agrochemical packages, and drawing up action plans for continuous improvement in sustainability using data collected by the GCP App. GCP's Social Well-being Initiative, in partnership with CeCafé and InPACTO, is currently developing many activities to improve living and working conditions in coffee producing areas. Members praised the high level of the debate and enjoyed the format of the meeting.

Source: GCP

() ZERO-CROP SYSTEM REDUCES IMPACTS OF DROUGHTS

Coffee plantations in the main producing areas of Brazil suffered from droughts in the last two producing seasons. In addition, lack of rainfall and higher temperatures caused the reduction of flowering. Pruned coffee plantations that used the zero-crop system were less impacted because they have a better balance between the aerial part and the root system and require less water. Although these plantations are not expected to produce as much as with a better water supply, their branches have normal flowering and cherry development than those of plants not pruned. Besides being a good option



to reduce handling and harvesting costs, the zero-crop system, that causes production to be missed every one or three years due to pruning of all branches near the trunk, is also an alternative to minimize the impacts of water stress.

Fonte: Fundação Procafé

(I) CLIMATE-SMART INITIATIVE TO COPE WITH ADVERSE CLIMATE EFFECTS

Small coffee growers in the Cerrado Mineiro region joined a climate-smart agriculture program to minimize the effects of climate change on coffee plantations. Created in 2019, the Program to Encourage Conscious Producers (PIPC, for its initials in Portuguese) is an initiative that works in four different fronts in the Córrego Feio river basin region: institutional engagement, connected landscapes, climate-smart agriculture management and water resources management. The growers implemented agroforestry systems such as intercropping with shrub species and other plant varieties to improve soil quality and integrity.

Source: Brasil Mongabay

(I) STUDY IN BAHIA AND PARÁ STATES SHOWS THE VIABILITY OF AGROFOREST COCOA PRODUCTION

The Economic Feasibility of Cocoa Production Study, jointly carried out by the CocoaAction Brasil initiative, Institute Arapyaú and WRI Brasil, has shown that cocoa production in association with native trees may guarantee good economic returns besides promoting environmental conservation. Launched last October and carried out in southern Bahia and Pará, that together account for approximately 95% of the total cocoa area and production in Brazil, the study establishes parameters to help growers and other players in the cocoa chain on investment decisions. In Bahia, the "cabruca" production system – agroforestry model in which cocoa is intercropped with native trees – is a good investment providing shade is less than 30%. It may not be viable with more intense shading. In Pará, the three agroforestry systems analyzed are economically viable. More information (in Portuguese), can be accessed here: https://bit.ly/3oHAa6o.

Source: CocoaAction Brasil

Brazilian Prices

Main Producing Regions / Farm Gate November 30, 2021 Arabica Naturals (R\$/ 60 kg bag) Conilon / Robusta (R\$/ 60 kg bag) Cerrado MG 1485,00 Colatina-ES fair average price 840,00 1480,00 Mogiana 1480,00 South Minas Real R\$ / Dolar US\$ BM&F (US\$/60kg Arabica bag) Arabica Pulped Naturals (R\$/ 60 kg bag) Dec 2021 266,70 Nov 30, 2021 5,64 1525,00 Mar 2022 275,75 Cerrado MG 270,15 South Minas 1520,00 May 2022



THE PERFECT STORM IN BRAZIL AND OPPORTUNITIES FOR OTHER ORIGINS

Much worse than what happened in the drought of 1986 and the frost of 1994, the combination of events that affected the Brazilian coffee business in 2021 are an excellent definition of a perfect storm: drought, frosts, drought again, logistics crisis, sharp price increases in fertilizers and pesticides, risk of barriers to access EU markets and, lately, excess rains and floods in Conilon areas.

While most components of this storm are specific to Brazil, the logistics crisis and more expensive inputs affect all coffee producing countries. However, freight increases have a greater impact on the CIF delivered prices of Brazilian coffees because the country is more distant from major coffee importing countries. Even though prices of fertilizers and pesticides have gone up for all producing countries, Brazil uses them more intensively for several reasons.

It is the perfect storm in Brazil because it affects the size of the crop and the cost of production and delivery of coffee in a way that is unparalleled in Brazil itself in the past and in most other producing countries past or present. Being Brazil by far the largest coffee producing country, it is no wonder that coffee prices have gone up in ways not seen in decades! This brings unique opportunities for all other coffee producing countries to increase their market share because the frosts may have impacts that go beyond the 2022 crop, the logistics crisis – high freight rates – may also go beyond 2022, and input prices are likely to remain high in the near future. In other words, there may be a window of opportunity for Brazilian competitors that goes beyond 2022.

Origins other than Brazil can benefit from this unique opportunity in several ways: in the short run, improved coffee processing – wet milling, drying and dry milling – to increase efficiency and to offer better quality coffees; in the next crop, good agricultural practices and smart increases in input usage to move towards maximum economic productivity; and, in the middle run, renovation and new planting with plague and disease resistant varieties that are more productive. These opportunities are greater for large growers and those who treat coffee as a business. Small growers are likely to benefit less because they are less efficient and usually sell their coffees for a lower price because they have less access to technology and less bargaining power.

Since the average size of the coffee farm in Brazil is 4 to 5 times larger than in the rest of the world, a major move for these countries that compete with Brazil to take advantage of this opportunity and to make the benefits more durable is to have their small growers to join forces and to work together to gain scale and efficiency. How can this be done? The first step to do this may be to process coffee together in small central wet mills in order to lower investment and operating costs. The next step may be to buy inputs – fertilizers and pesticides – together to lower costs of production. The last step may be to sell coffee together to get better prices.

The use of central coffee processing facilities may go beyond micro and small wet milling units to include central drying and cleaning and hulling facilities for coffees coming from a group of wet mills. This can be one step further to increase efficiency, to lower costs and to increase growers' profits. This becomes one of the main roles of coffee growers' cooperatives as more and more coffee is brought together and size, density and color grading is added along with bulking and blending. This consolidation of processing may require fewer people but improved production technology may displace many more workers than more efficient processing itself.

A question that is often ignored in the coffee business is: should the future of coffee production rely on a large number of people whose income or wage is not enough for them to have a decent, prosperous life or, instead, on fewer people who have a fair income or wage? The answer to this cumbersome question should not be sought within the coffee business, within the coffee supply chain alone, as it is mistakenly expected. The answer lies on regional development to create the jobs that are required outside coffee production as it becomes more efficient.

The perfect storm in Brazil does create opportunities that those concerned with development in coffee producing countries should look at with wider lenses that include regional or even national development policies that go beyond the coffee business itself. Good Agricultural Practices (GAP) and central milling should trigger a process of economic development that goes beyond the coffee business alone and becomes one of the components of regional or national development plans.

MACHINE OF THE MONTH



COMPACTA: THE NEW COMBINED HULLING UNIT

Pinhalense has recently launched the new combined coffee huller COMPACTA. The new machine is already a big success in Brazil, with over 100 units sold, and will now be offered in the international market.

The COMPACTA is the new member of the family of combined units that already includes the micro/small lot C2DPRC and the larger capacity CONs.

The COMPACTA innovates on several grounds:

- it is easy to assemble and install,
- it has a *unique* coffee cleaning system with *built-in* pre-cleaner and destoner equipped with an *aspiration* system,
- low power consumption, and
- low floor space requirement.

INNOVATION - The COMPACTA is an efficient combined coffee huller specially developed for micro and small lots, with the advantage of an updated design and, very important, a built-in coffee cleaning system.

QUALITY AND EFFICIENCY - The COMPACTA delivers the same high quality products with the same efficiency of larger Pinhalense machines because it has the same sturdiness, durability, smart technologies and quality that are standard in Pinhalense equipment.

CAPACITY - The capacity of the COMPACTA is from 400 to 600 kg of

green coffee per hour, depending on the type and cleanliness of incoming coffee.

Pinhalense Problems (Problems)

PRODUCTS PROCESSED - The COMPACTA is compatible with cherry and parchment coffee, i.e., coffees produced using the natural, pulped natural / honey and washed systems. Green coffee derived from parchment may be polished in a Pinhalense machine DBD-5 installed immediately after the COMPACTA.